TENDER DOCUMENT

Supply, Installation & Commissioning of Inspection Equipment and Operation of Automated Vehicle Fitness Testing Station (ATS) at Jadigenahalli (Bengaluru) in Karnataka State (Call-4)

Tender No. 37/ 2024-25

Dated: 21-02-2025

Bangalore Metropolitan Transport Corporation

DISCLAIMER

1. This Tender Document is being issued by **Bangalore Metropolitan Transport Corporation (BMTC),** for the selection of a successful bidder for Supply, Installation & Commissioning of Inspection Equipment at **Automated Vehicle Fitness Testing Station (ATS), Jadigenahalli (Bengaluru)** in Karnataka State. After the ATS is commissioned regular maintenance of the equipment & providing all necessary consumables shall be the responsibility of the bidder. Design, construction & civil work of equipment foundations including allied services like test shed trimix flooring, epoxy coating for the flooring, conduiting for cables including 3-phase & Single phase cables & drainage, compressor piping will also be scope of the bidder. The suitable exhaust gas handling system is to be selected, supplied, installed & commissioned by the successful bidder. Successful bidder shall also provide fresh air ducting for all underbody inspection pits. This hereinafter referred to as the "**Works**".

2. The information contained in this Tender Document is being provided for the limited purposes of enabling the interested parties ("**Bidders**") to submit a binding proposal ("**Bid**") for performing, executing and implementing the Works and for no other purpose. In no circumstances shall BMTC or their employees, advisers, consultants, contractors, servants and/or agents incur any liability arising out of or in respect of the issue of this Tender Document, or the selection procedure.

3. The use of the Tender Document in any manner contrary to any applicable law is expressly prohibited. The Bidders shall inform themselves and shall observe any applicable legal requirements.

4. The information does not purport to be comprehensive or to have been independently verified. Nothing in this Tender Document shall be construed as legal, financial or tax advice. BMTC will not be liable for any costs, expenses, however so incurred by the Bidders in connection with the preparation and submission of the Bids.

5. BMTC reserves the right to amend this Tender Document and any information contained herein at any time to the Bidders. The amendment document shall be notified through website and such amendments shall be binding on those concerned.

6. Nothing in this Tender Document is, nor shall be relied upon as, a promise or representation as to BMTC ultimate decision in relation to the selection process of the successful Bidder for the execution of the Contract (defined hereinafter). The Bidder(s) shall not, therefore, assume that they will have the opportunity to revise their Bids following submission except as provided in this Tender Document, without assigning any reason whatsoever. However, BMTC reserves the right to change the basis of or the procedures (including the timetable) relating to the bidding process, reject any, or all, of the Bids, not to invite a Bidder to proceed further, not furnish a Bidder with additional information nor otherwise to negotiate with a Bidder at any time. BMTC does not undertake to accept the lowest or indeed any Bid, without assigning any reason.

7. No person other than the one authorized by BMTC to give any information or to make any representation not contained in this Tender Document and, if given or

made, any such information or representation shall not be relied upon a shaving been so authorized in writing.

8. Canvassing in any form shall result in rejection of the bid.

9. The applicant shall be deemed to have duly considered all terms of this Invitation for the bid document and acknowledge that it intends to submit bid offer in accordance with the provisions of this document having accepted the terms and conditions as have been incorporated herein and / or that may be incorporated by BMTC through any Addendum/s.

10. This Tender Document is confidential and personal to each Bidder. The Bidders shall note that they are required to sign and submit as part of the Technical Bid, as provided in **"Form b) Letter of Undertaking**" of this Tender Document, a Letter of Undertaking to BMTC which, inter alia, prohibits disclosure of any information as therein defined to any person or body corporate except as permitted by such Letter of Undertaking. Any failure to furnish or comply with the terms of the Letter of Undertaking shall entitle BMTC to disqualify the relevant Bidder.

11. Any summaries or descriptions of documents or contractual arrangements contained in any part of this Tender Document are only indicative and cannot be and are not intended to be comprehensive, nor any substitute for the underlying documentation (whether existing or to be concluded in the future), and are in all respects qualified in their entirety by reference to them.

12. BMTC, its employees, advisers, consultants, contractors, servants, agents do not accept any responsibility for the legality, validity, effectiveness, adequacy or enforceability of any documentation executed, or which may be executed, in relation to the Works. BMTC shall enter into a contract individually, with the successful Bidder for performance, execution and implementation of the Works ("**Contract**"). No legal or other obligation shall arise between the successful Bidder and BMTC unless and until the Contract has been formally executed by BMTC and the successful Bidder and any conditions precedent to the effectiveness of the Contract have been fulfilled. BMTC reserves the right not to proceed with the bidding process and to cancel the selection procedure, or any part thereof, at any time.

13. Nothing in this Tender Document shall constitute the basis of the Contract which may be concluded in relation to performance, execution and implementation of the Works nor shall such documentation/information be used in construing the Contract. Each Bidder must rely on the terms and conditions contained in the Contract, when, and if, finally executed, subject to such limitations and restrictions which may be specified in such Contract. Any reference to this Tender Document in the Contract with BMTC or any correspondence between BMTC and the Bidder shall not be construed as this Tender Document forming part of such contract.

14. The Bidder is prohibited from any form of collusion or arrangement by a Bidder (or its advisers or consultants) in an attempt to influence the selection, award process or any other process. Giving or offering of any gift, bribe or inducement or any attempt to any such act on behalf of the Bidder towards any officer/employee of BMTC or to any other person in a position to influence the decision of BMTC or any other person associated with the bidding process, for showing any favour in relation to this Bid or

any other contract, shall render the Bidder to such liability / penalty as BMTC may deem proper, including but not limited to rejection of the Bid and forfeiture of the Earnest Money Deposit.

15. Laws of the Republic of India are applicable to this Tender Document. The courts at Bengaluru shall have exclusive jurisdiction in relation to any disputes arising from this Tender Document.

16. Each Bidder's acceptance of delivery of this Tender Document constitutes its agreement to, and acceptance of, the terms set forth in this Disclaimer. By acceptance of this Tender Document, the recipient agrees that this Tender Document and any information herewith supersedes document(s) or earlier information, if any, in relation to the subject matter hereof.

17. All documents and communication will be in English only. Any document which is submitted in any other language, other than English will be acceptable only if accompanied by self-certified English translated version. BMTC will have the right to verify the same independently.

18. Arbitration:

The disputes or differences, arising from this Invitation for bid document or in any manner connected therewith shall be subject to the following dispute resolution mechanism:

(i) Any dispute shall initially be referred to the designated Senior Management of the parties for amicable settlement. Parties shall nominate two persons each from their Senior Management within ten days of a dispute arising.

(ii) If no amicable settlement is arrived at within 30 days, then any party may refer the dispute t oa Sole Arbitrator to be nominated by the BMTC. The place of arbitration shall be Bengaluru. All arbitration proceedings shall be conducted in English and in accordance with the provisions of the Arbitration and Conciliation Act 1996 as amended from time to time.

(iii) The Arbitration award will be final and binding upon the parties, and each party will bear its own costs of arbitration and equally share the fees of the arbitral tribunal unless the arbitral tribunal decides otherwise.

(iv) All disputes shall be subject to the exclusive jurisdiction of Courts at Bengaluru only.

19. Governing Law:

Indian laws, both substantive and procedural, shall govern.

INDEX

TENDER DOCUMENT

1	INTRODUCTION	6
2	MODALITIES	8
3	INSTRUCTIONS TO BIDDERS	9
4	SCOPE OF WORK	10
5	EARNEST MONEY DEPOSIT	11
6	SUBMISSION OF BIDS	12
7	DEVIATIONS	15
8	AMENDMENT TO TENDER DOCUMENT	15
9	VALIDITY OF BIDS	15
10	CLARIFICATIONS TO BIDDER'S QUERIES	16
11	BID EVALUATION PROCESS	16
12	BMTC RIGHT TO ACCEPT OR REJECT ANY OR ALL BIDDERS	18
13	NON-EXCLUSIVITY	18
13	PROCESS TO BE CONFIDENTIAL	18
14	PERFORMANCE BANK GUARANTEE	18
15	TERMS OF PAYMENT	19
16	GENERAL	20
17	LIST OF ANNEXURES	20
18	LIST OF FORMS	20

ANNEXURES

Annexure I	Scope of Work	22
Annexure II	Site Description	36
Annexure III	Bidder's Company Requirements	37
Annexure IV	Equipment Details	43
Annexure IV-A	IT Equipment Specifications	60
Annexure V	Characteristics of Vehicles to be Tested	64
Annexure VI	Evaluation Parameters	65
Annexure VII	Acceptance Criteria	68
Annexure VIII	Terms of Payment	70
Annexure IX	General Conditions of Contract	73

Forms

Form a)	Letter for Submission of Technical Proposal	138
Form b)	Letter of Undertaking	139
Form c)	Earnest Money Deposit as Bank Guarantee Format	140
Form d)	Power of Attorney Format	142
Form e)	Performance Bank Guarantee and form of Demand	145
Form f)	Deviations Suggested	148
Form g)	Detailed Technical Specifications	149
Form h)	References	161
Form i)	Service Support	163
Form j)	Bidder's Organization, Company Profile	165
Form k)	Description of Approach, Methodology, Work and Training Plan	167
Form l)	Financial Proposal	170
Form m)	Contact Details	171

TENDER DOCUMENT

1. INTRODUCTION

With the increase in vehicle population, it is essential to ensure that the in-use vehicles, which are on road, meet the safety and emission requirements for safe and environmental friendly situation. The Automated Vehicle Fitness Testing program is an effective tool to improve the condition of the in-use vehicle fleet.

BMTC has declared its intention to set up Automated Vehicle Fitness Testing Station (ATS) at Jadigenahalli (Bengaluru) in Karnataka State. The work of construction of this ATS has been assigned to BMTC. The Automotive Research Association of India (ARAI) is selected by BMTC to provide them consultancy for the same.

Bangalore Metropolitan Transport Corporation (BMTC),
Details:

Bengaluru Metropolitan Transport Corporation,
Central Office,
K H Road, Shanthinagar,
Bangalore - 560027.

BMTC invites e-tender for execution from the Bidders in the prescribed proforma for performing, executing and implementing the Works on the terms and conditions contained in this Tender Document and in the Contract.

Brief description of Works and the timelines for tenders are summarized in the table below.

Description of Work	This Tender Document is being issued by BMTC for selection of a successful bidder for • Supply, installation & Commissioning of identified test equipment including integration of test systems and system checking at ATS, Jadigenahalli, Bengaluru, Karnataka. • Supply of necessary calibration tools, special tools and requisite software for smooth operation of the ATS. • Design, construction & civil work of equipment foundations including allied services like test shed trimix flooring, epoxy coating for the flooring, conduiting for cables including 3-phase & Single phase cables & drainage, compressor piping. • Supply, installation & commissioning of suitable exhaust gas handling system & provision for fresh air ducting for all underbody inspection pits. • Comprehensive Annual Maintenance Contract for 3 years after completion of warranty period of 2 years. • Preparation of Manuals & imparting induction training and refresher training to the officers of BMTC.
Earnest Money Deposit	**Rs. 6,45,000 /-(Rupees One Lakhs Only)** EMD to be submitted through the payment gateway at E – Tender portal (**kppp.karnataka.gov.in**).
Sale of Tender Document	Tender Documents can be downloaded the website of (**kppp.karnataka.gov.in**). The Bidders will have to pay the requisite Tender processing fee (Non Refundable) as indicated in the e-procurement website.
Tender Document Cost	**Nil**
Last Date for Submission of Queries (If any)	Upto **03-03-2025** at **17.00** hrs by email to civildepartmentbmtc@gmail.com
Pre-Bid Meeting to clarify the Queries submitted	On **04-03-2025** at **15:00 Hrs** at BMTC office, Bengaluru.
Submission of Bids (Refer appropriate clauses for details)	Up to **17.00** hrs on **07-03-2025 through** e-procurement portal.
Opening of Technical Bids	**10-03-2025** at **11:00 Hrs** at BMTC Central office, K.H. Road, Shanthinagar, Bengaluru.

2. MODALITIES

The Tender Documents will have to be downloaded directly from the websites mentioned above.

- A complete set of tender documents is available at **kppp.karnataka.gov.in** for viewing and download. All the notification & details, terms and conditions regarding this tender notice hereafter will be published online on e-tendering website **kppp.karnataka.gov.in**. The guidelines to download the tender documents and online submission of bids and procedure of tender opening can be downloaded from website **kppp.karnataka.gov.in**. The bidders are advised to go through the manuals in detail to understand the bid submission process.
- The bidder needs to submit their bids online on **kppp.karnataka.gov.in**. The bidders are required to fill the tender online as per the timelines provided. The tender fee and EMD has to be paid online.
- The bidders must make the payments towards tender fee by taking sufficient margin for time lags between the online payment and settlement / realization and other Banking Procedures in the pooling account and reflection of the same in the online tender system. The tender fee shall be non-refundable.
- The Executive Engineer - BMTC reserves the right to accept or reject any or all the tenders without assigning any reason whatsoever.
- For MSME bidders a certificate (which is valid as on date of submission of bid) of registration with NSIC to be uploaded as a part of Key Submission. However, Earnest Money Deposit (EMD) exemption is not allowed.
- The bidders must possess compatible digital Signature Certificate of Class-II or Class-III to participate in the e-tendering process.
- Bidder may contact helpline support numbers mentioned on the **kppp.karnataka.gov.in**.

3. INSTRUCTIONS TOBIDDERS

3.1 The Bidder must ensure that he meets all the requirements spelt in "**Annexure III– Bidder's Company Requirements**".

3.2 The Bidders are expected to carefully examine all the contents of the Tender Document including instructions, conditions, terms, specifications and drawings and take them fully into account before submitting their Bid. Failure to comply with the requirements as detailed in these documents shall be at the Bidder's own risk. Bids which are not responsive to the requirements of the Tender Document will be rejected.

3.3 While all efforts have been made to avoid errors in the drafting of the Tender Document, the Bidders are advised to check the same carefully. No claim on account of any errors detected in the Tender Document shall be entertained.

3.4 Bidders should study Tender Documents carefully and thoroughly before quoting and get clarifications, if required, from BMTC in this context.

3.5 The Bid prepared by the Bidder and all correspondence and documents relating to

the tender exchanged between the Bidder and BMTC shall be in the English language.

3.6 Each of the Bid documents should be stamped and signed by the person or persons submitting the Bid in token of his/their having acquainted himself / themselves with the Tender Documents in entirety including all the Annexures and Forms. Any Bid not complying with the terms and conditions as set out in this Tender Document and

/ or not signed by authorized person may be rejected at the discretion of BMTC. All documents submitted are subject to verification with the originals and the originals of the documents uploaded shall be produced for verification upon intimation. If the certificates / supporting documents submitted are in any other language apart from English, then apostilled & notarized sworn translation of the same in English has to be submitted. If translated document is not submitted, then the original document will not be considered for evaluation.

3.7 The Bid submitted on behalf of a Firm shall be signed by all the Partners of the Firm or by a Partner who has the necessary authority (supported with documentary evidence) on behalf of the Firm to submit the Bid.

3.8 The Bidder must obtain for himself on his own responsibility and at his own expenses all the information which may be necessary for the purpose of preparation and submission of the Bid and for entering into a Contract, must inspect the site of Works,

acquaint himself with all local conditions, means of access to the site, nature of the Works and all matters pertaining thereto.

3.9 The bidder shall fill the 'Form m) Contact Details form' issued with this Bidding document and upload the same along with the bidding documents and BMTC would use these details to communicate with the bidder in case of issuance addenda & verification of Originals of the Documents submitted.

3.10 BMTC may apply the provisions of Public Procurement (Preference to Make in India, Order 2017 issued by Department of Industrial Policy & Promotion & its subsequent revisions and AatmaNirbhar Bharat Abhiyan) wherever applicable as per guidelines of Govt. of India. Any Indian manufacturer (Class-I local supplier) having valid technology transfer will be considered as OEM of Major equipment (as defined in 1.2 of Annexure – III: Bidders Company Requirement) and allowed to utilize the credential of the principal OEM with which it has valid Technology Transfer Agreement. Indian manufacturer (Class-I local supplier) at the time of bidding shall be required to provide a certificate from the statutory auditor or cost auditor of the company giving the percentage of local content.

3.11 As per Ministry of Finance, Department of Expenditure, Public Procurement Division Order (Public procurement No. 1) F.No.6/18/2019-PPD dated 23rd July, 2020 regarding Restrictions under Rule 144 (xi) of General Finance Rules (GFRs), 2017, Any Bidder (including members of consortium) from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority. In work contracts, including turnkey contracts, contractors shall not be allowed to sub-contract to any contractor from a country which shares a land border

with India unless such contractor is registered with the Competent Authority. A certificate of compliance with this order should be submitted by bidder along with technical bid, if applicable. Bidder shall submit the declaration about country of origin for the Quoted equipment in technical bid.

3.12 Latest notifications of Govt. of India regarding Public Procurement will be referred for concluding the result of tender.

4. SCOPE OFWORK

4.1 The scope of Work shall be as described under "**Annexure I -Scope of Work**".

4.2 The successful Bidder shall perform, execute and implement the Works strictly in accordance with Drawings, details, specifications, standard engineering practices and instructions of BMTC and in accordance with the terms and conditions of the Contract to ensure that the Works proceed smoothly without any delay and to the satisfaction of BMTC.

4.3 The Work shall be carried out strictly in compliance with the requirements of the project conditions.

4.4 Any subcontracting by the successful Bidder for performance, execution and implementation of the Works shall be with the prior consent of BMTC.

4.5 The successful Bidder should make his own arrangement to obtain all materials required for performing, executing and implementing the Works.

5. EARNEST MONEYDEPOSIT

5.1 The Bids shall be accompanied by an **Earnest Money Deposit** of **Rs. 6,45,000 /- (Rupees Six Lakhs Forty Five Thousand Only)** submitted through the payment gateway at E – Tender portal (**kppp.karnataka.gov.in**).

5.2 A Bid which is not accompanied by such Earnest Money Deposit will be construed as non- compliant bid and shall be summarily rejected.

5.3 EMD of disqualified Bidders will be discharged / returned as promptly as possible, but not later than 30 days after Signing of the Contract with the Successful Bidder.

5.4 No interest shall be paid on the EMD whatsoever.

5.5 The Earnest Money Deposit of the successful Bidder will be returned upon acceptance of the Work Order, by the successful Bidder, and furnishing the **Performance Bank Guarantee of Rs. 30,00,000 /- (Rupees Thirty Lakhs Only)** in the form of DD or Bank Guarantee.

5.6 A Bidder shall forfeit Earnest Money in case, such Bidder-

5.6.1 fails to start the work as may be indicated in the Letter of Award or fails to execute the Contract within a period of 30 days from the date of issue of the Letter of Award;

5.6.2 without the written consent of BMTC has withdrawn its Bid during the validity period of the Bids and any extensions thereto;

5.6.3 after opening of the financial bid, alters the quoted rates/conditions in the Bid;

5.6.4 fails to provide /furnish the Performance Security within stipulated period

mentioned in the Letter of Award.

5.6.5 If a bidder submits a non-responsive bid;

5.6.6 If a Bidder withdraws his bid or increases his quoted prices during the period of bid validity or its extended period, if any.

5.6.7 If during the bid process, a bidder indulges in any such deliberate act as would jeopardize or unnecessarily delay the process of bid evaluation and finalization.

5.6.8 If during the bid process, any information is found false/fraudulent/mala fide, then BMTC shall reject the bid and, if necessary, initiate action provided

5.6.9 If a bidder engages in a corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.

5.6.10 In the case of successful bidder, if he/she fails within the specified time limit–

5.6.10.1 To sign and return the duplicate copy of LOA in accordance with the terms thereof;

5.6.10.2 to sign the contract within the time specified by BMTC; or

5.6.10.3 to furnish the Performance Bank Guarantee within the period prescribed in the contract;

5.6.11 During the bid process, if a Bidder indulges in any such deliberate act as would jeopardize or unnecessarily delay the process of bid evaluation and finalization.

5.7 The PBG of successful bidder shall be kept valid for entire installation and commissioning period, operations period of 5 years post commissioning and will be returned upon completion of entire period of 5yearsof successful operation plus six months. Performance Bank Guarantee has to be provided in the name of BMTC.

6. SUBMISSION OF BIDS

E-submission of bid documents would comprise of the following submissions.

Sr. No.	Submission	Links under which documents are to be uploaded at Bid Submission
1.	Tender Document Cost	Tender document Fee
2	Technical Bid Submission	Upload Technical Bid Documents
3	Financial Bid Submission	Upload Financial Bid Document
4	Declaration	Declaration

Technical Bid Submission

The documents listed at para 6.1.2 of the Tender document shall be filled as per the formats provided, shall be duly signed by the authorized signatory and the same shall be scanned and uploaded under the respective links provided for each document under the sub-criteria “Upload Technical Bid Documents”.

Financial Bid Submission

The documents shall be filled as per the format provided, shall be duly signed by the authorized signatory and the same shall be scanned and submitted/uploaded under the respective links provided for each document under the sub-criteria "Upload Financial Bid Document".

- ✓ Care shall be taken to upload the prices only against the slot/link specified for "FinancialBid" and not to be uploaded in any other slots / links.
- ✓ The Bidder shall complete the Financial Bid submission process by filling in the quoted amount (inclusive of all taxes except GST) on the blank space provided next to "**Service Fee**" under the "**Financial Offer**" link.

Declaration

The Bidder shall comply with the declaration criteria by selecting the compliance options provided in the Declaration web page.

Completion of Bid Submission:

a. The Bidder shall complete the Bid Submission process by clicking on the "Submit Bid" link provided at the bottom of the "Bid Submission Summary / Overview" webpage.
b. The Bidder shall ensure that a "Green Tick" is displayed at the Status icons provided against each of the five Bid Submission criteria (Tender document Fee, EMD, Upload Technical Bid Documents, Upload Financial Bid Document and Declaration).

Bidders are required to submit their Bids in two parts through e-procurement portal before the closure of bid submission date/time.

Instructions to Bidders

A. This is an e-tender; Interested tenderers/Bidders may download the tender document from **kppp.karnataka.gov.in** and submit their bids online at e-procurement portal website: **kppp.karnataka.gov.in**
B. Bidders should strictly follow the date & time schedule mentioned under the Tender enquiry on e-procurement portal **kppp.karnataka.gov.in**
C. Bids received on e-tendering portal only will be considered. Bids in any other form sent through sealed cover/email/post/fax etc. will be rejected.
D. BMTC will not be responsible for any delay in submitting /uploading the offer on tender portal. Hence, bidders are advised to upload their bids well in advance.
E. The request for extension to "Bid submission end date" should be avoided, in case extension is inescapable, BMTC can take the decision.
F. For tender content related doubts bidder should contact BMTC contact person, contact details are given in Table above.

G. While submitting the tender, if any of the prescribed conditions are not fulfilled or are incomplete in any form, the tender is liable to be rejected. If any tenderer stipulates any condition of his own, such conditional tender is liable to be rejected.

H. All the tender documents & financial bid to be uploaded as per this tender are to be digitally signed by the bidder.

I. GST registration no. details should be submitted in technical bid.

J. Bids received after the due date and the specified time (including the extended period if any) for any reason whatsoever, shall not be entertained and shall not be opened in the e- Tendering system.

*6.1 **Part –1: The TechnicalBid***

6.1.1 Bidders are required to submit their Bids through e-procurement portal before the closure of bid submission date/time. Proper care should be taken to ensure that the Technical and Financial Bid documents are uploaded in the respective links only.

6.1.2 The Technical Bid shall contain supporting documents for the eligibility criteria defined in Annexure III along with duly filled Forms (scanned &uploaded):

Form a) Letter for Submission of Technical Proposal

Form b) Letter of Undertaking

Form c) Deleted

Form d) Power of Attorney Format

Form e) Performance Bank Guarantee (format only)

Form f) Deviations Suggested

Form g) Detailed Technical Specifications

Form h) References

Form i) Service Support

Form j) Bidder's Organization, Company Profile and Sub-Contractors

Form k) Description of Approach, Methodology, Work and Training Plan

Form l) Deleted

Form m) Contact Details

*6.2 **Part-2: The FinancialBid***

The Amount quoted shall be inclusive of all applicable statutory taxes (excluding GST).

6.2.1 The Bidders shall quote for the entire Works such that the total contract value covers all its risks, obligations and liabilities set out in or to be reasonably inferred from this Tender Document including but not limited to matters in respect of Design, construction & civil work of equipment foundations including allied services like test shed trimix flooring, epoxy coating for the flooring, conduiting for cables including 3-phase & Single phase cables & drainage, compressor piping, selection of suitable

exhaust gas handling system, provision of fresh air ducting for all underbody inspection pits, delivery of Test lane equipment up to site, insurance, freight costs, customs clearances, interface management, detailed design, detailing, coordination, value engineering, specialist system procurement, erection and /or installation, testing, commissioning, documentation, training of BMTC officers, defects remediation, reporting to BMTC. However, in case of imported equipment, prices quoted shall include all taxes and charges including, but not limited to transit insurance charges from FOB port of shipment or Airport up to the site, including charges for Custom Clearances, etc.

6.2.2 The prices shall be quoted in Indian Rupees only. The amounts shall be quoted in figures and words and in case of inconsistency, the words shall prevail.

6.3 **Manner of submission**

6.3.1 The two-part Bid shall be submitted online up to the said date and time.

6.3.2 BMTC may, at its discretion, extend the deadline for submission of Bids by issuing an addendum, in which case all rights and obligations of BMTC and the Bidders previously subject to the original deadline will thereafter be subject to the extended deadline.

6.3.3 BMTC reserves the right to, without limitation, without incurring any obligation or liability vis-à-vis any Bidder and without expressing any cause or reason thereof, at any time and at its sole discretion to independently verify, disqualify, reject and/or accept any and all Bids or other information and/or evidence submitted by or on behalf of any Bidder, including without limitation pursuant to and/or in connection with:

(a) receipt of a Bid after the submission deadline;

(b) failure to submit necessary supporting documentation following a specific request by BMTC.

6.3.4 All the Bid documents have to be uploaded on the e-procurement portal only. Any document submitted manually or by other means would not be accepted.

7. DEVIATIONS

7.1 In case, the Bidder fails to respond to any of the requirements, the Bidder is given the opportunity of explaining why the proposed solution is equivalent or better to the Minimum Requirement by filling document **"Form f) Deviations Suggested".**

7.2 In case, BMTC finds any deviation which is not declared as part of the deviation form submitted by the Bidder, BMTC reserves the right to reject the bid summarily without assigning any reasons.

8. AMENDMENT TO TENDERDOCUMENT

8.1 Addenda / Corrigenda to the Tender Document may be issued by BMTC prior to the last date of submission of the Bids to clarify the documents or to reflect any

modifications etc. All such addenda / corrigenda shall be treated as an integral part of the Tender Document. All such addenda / corrigenda shall be notified only in the e-procurement portal.

8.2 In order to afford prospective Bidders reasonable time for preparing their tenders after taking into account such amendments, BMTC may, at its discretion, extend the deadline for submission of tenders.

8.3 In case after issuance of addenda, any Bidder who has already submitted its Bid, does not resubmit its Bid, it shall be deemed that such Bidder does not intend to modify its Bid on the basis of the addenda and the addenda have been taken into account.

9. VALIDITY OF BIDS

9.1 Bids shall be unconditional, firm and remain valid and open for acceptance for a period of **120 days** & should be extendable for additional period of 60 days on request by BMTC without any additional cost, from the last date of submission of bids. Any Bid having validity lower than that specified above shall be rejected by BMTC as being non responsive.

9.2 If a Bidder withdraws or revokes his offer after last date of submission of Bids, the Bidder is liable to be disqualified and the Earnest Money Deposit submitted by such Bidder is liable to be forfeited. Any Bidder shall not be allowed to carry out any revision / correction / modification in his Bid after the last date of submission of Bids.

9.3 Incase BMTC calls the Bidder for clarifications then this shall not amount to cancellation or withdrawal of original offer. BMTC reserves the right to finalize the technical evaluation by conducting such seeking clarifications, till the start date/time of the financial bid opening and prior to declaration of technical evaluation.

9.4 The equipment's should preferably be delivered to each site in single slot & in case of part delivery not more than three slots. This is in order to ensure one-time inspection of all equipment supplied.

9.5 BMTC will issue the Work Order within **120 days** from the date of award of contract. The validity of Bid / Work Order will be six years including the five years of Warranty and AMC period post commissioning which can be further extended as per terms and conditions mentioned in this tender document.

10. CLARIFICATIONS TO BIDDER'SQUERIES

The Bidders are requested to raise their queries, if any, by email at civildepartmentbmtc@gmail.com up to the mentioned time. BMTC will address all the queries received from all the Bidders in the Pre-Bid meeting only. The responses will be uploaded on the e – procurement website. The queries and responses thereto, would be uploaded without identifying the source of queries. BMTC reserves the

right not to respond to questions raised or provide clarifications sought, in their sole discretion, if itis considered that it would be inappropriate to do so. Nothing in this section shall be taken or read as compelling or requiring BMTC to respond to any question or to provide any clarification.

11. BID EVALUATION PROCESS

The bidding evaluation process will be as follows:

EMD of **Rs. 6,45,000/- (Rupees Six Lakhs Forty Five Thousand Only)** shall be submitted through the payment gateway at E–Tender portal (**kppp.karnataka.gov.in**)

Any bid submitted without EMD and Tender document fee will be disqualified.

11.1. Technical BidsOpening

11.1.1 The bids shall be opened online as per the prescribed schedule. (Bidders may present at BMTC Central Office, Bengaluru if they wish).

11.2 Technical BidEvaluation

11.2.1 During the technical bid evaluation process, BMTC may ask clarifications from the bidder through E-mail/ Fax, for confirming and consolidating their technical offers.

11.2.2 All such clarifications are required to be answered by the bidder by E-mail/Fax, within the time specified by BMTC. The signed hard copies of the same need to be submitted to BMTC and shall be deemed to be the part of the tender documents.

11.2.3 All valid bids shall be evaluated as per "Annexure VI - Evaluation Parameters" to determine technically qualified bids.

11.2.4 The result of technical bid evaluation will be published on online portal.

11.2.5 Financial bids of only the technically qualified bidders shall be opened.

11.3 Financial BidsOpening

11.3.1 The Financial bids of all the technically qualified Bidders shall be opened online.

11.3.2 BMTC reserves the right to revise the scope of work or specifications considered necessary in the bid process through Addenda/ Corrigenda well within the last date of submission of bids.

11.3.3 This will be a segregated bid evaluation system.

11.4 Financial BidEvaluation

11.4.1 All valid financial bids shall be evaluated/scrutinized as per "**Annexure VI-Evaluation Parameters".**

11.5 Determination of the SuccessfulBidder

11.5.1 The best evaluated bid shall be determined as per "Annexure VI - Evaluation Parameters".

11.5.2 The Bidder with the lowest cost as per the evaluation parameters shall be deemed as

the successful Bidder ("Successful Bidder") as per the segregated bid evaluation system.

11.6 Notification and Issue of Letter ofAward

11.6.1 After selection, a Letter of Award (LOA) shall be issued, in duplicate, by the Authority to the selected bidder and the selected bidder shall, within 7 (seven) days of receipt of LOA, sign and return the duplicate copy of the LOA in acknowledgement thereof.

11.6.2 At the same time, the selected bidder shall also pay a Performance Security in the form of Demand Draft (DD) or an irrevocable Bank Guarantee in favour of "Chief Accounts Officer- FA, BMTC" issued by nationalized or scheduled banks, having head office in India, payable at Bengaluru only.

12. BMTC RIGHT TO ACCEPT OR REJECT ANY OR ALL BIDDERS

BMTC reserves the right to accept or reject any bid, and to annul the tender process and reject all Bids, at any time prior to award of Contract without assigning any reasons for such acceptance / rejection, or to divide the Contract between / amongst Bidders without thereby incurring any liability to the affected Bidder or Bidders or any obligations to inform the affected Bidder or Bidders of the grounds for BMTC action. The Bidders shall not have any cause of action or claim against BMTC for rejection of their bids.

13. NON-EXCLUSIVITY

The right of the Successful Bidder to perform executes and implements the Works or any part there of pursuant to the Contract, is not exclusive and shall not prevent BMTC from granting a similar right to other parties.

14. PROCESS TO BECONFIDENTIAL

14.1 Except the public opening of Bids, information relating to the examination, clarification, evaluation and comparison of Bids and recommendations concerning the award of Contract shall not be disclosed to Bidders or other persons not officially concerned with such process.

14.2 Any effort by a Bidder to influence BMTC or any of its functionaries in the process of examination, clarification, evaluation and comparison of tenders and in decisions concerning award of contract, may result in the rejection of the Bid.

14.3 As part of his Technical Bid, the Bidder shall be required to furnish an undertaking for confidentiality as "**Form b) - Letter of Undertaking**".

15. PERFORMANCE BANKGUARANTEE

15.1 The bidder shall submit Performance Bank Guarantee of **Rs. 30,00,000 /- (Rupees Thirty Lakhs Only)** in the form of Demand Draft (DD) or an irrevocable Bank

Guarantee in favour of "Chief Accounts Officer- FA, BMTC " issued by nationalized or scheduled banks, having head office in India, payable at Bengaluru only at the time of signing of contract. Performance Bank Guarantee is required to be submitted by the Successful Bidder only after receipt of the Work Order. All charges whatsoever such as premium; commission etc. with respect to the Performance Bank Guarantee shall be borne by the bidder.
Format of Performance Bank Guarantee is given in **form e)**.

15.2 The Performance Bank Guarantee of the Successful Bidder will be invoked and forfeited if the Successful Bidder fails to comply with the conditions of Work order.

15.3 The PBG of successful bidder will be returned upon completion of entire period of 5 years plus six months from the date of commissioning of equipment. Performance Bank Guarantee has to be provided in the name of Chief Accounts Officer- FA, BMTC.

15.4 The Performance Bank Guarantee may be discharged/ returned by BMTC upon being satisfied that there has been due performance of the obligations of the Bidder under the contract. However, **no interest shall be payable on the Performance Bank Guarantee**.

15.5 In the event of the Bidder being unable to service the contract for whatever reason BMTC would invoke the PBG. Notwithstanding and without prejudice to any rights whatsoever of BMTC under the contract in the matter, the proceeds of the PBG shall be payable to BMTC as compensation for any loss resulting from the bidder's failure to complete its obligations under the Contract. BMTC shall notify the Bidder in writing of the exercise of its right to receive such compensation within 15 days, indicating the contractual obligation(s) for which the Bidder is in default.

15.6 BMTC shall also be entitled to make recoveries from the bidder's bills, performance bank guarantee, or from any other amount due to him, the equivalent value of any payment made to him due to inadvertence, error, collusion, misconstruction or misstatement.

15.7 The Performance Bank Guarantee shall be forfeited and encashed either wholly or partly, inter alia, in the following cases:

15.7.1 If the Successful Bidder withdraws from the project midway during the project term,

15.7.2 If during the project term, there is any incident of gross professional negligence resulting in delayed service, or adversely affecting the quality of the work.

15.7.3 Any act or acts of the successful bidder which render the project un-operational and BMTC establishes sufficient reasons to forfeit the Performance Bank Guarantee.

15.7.4 Successful Bidder defaults on any conditions(s) laid in this document,

15.7.5 Successful Bidder is found to have made misleading or false representation in the forms, statements and attachments submitted or attached to the bid, or,

15.7.6 The bidder is found indulging in corrupt, fraudulent practices or coercive practices..

16. TERMS OFPAYMENT

16.1 The terms of payment shall be as described in "**Annexure VIII – Terms of payment**"

17. GENERAL

17.1 BMTC reserves the right to, without limitation, without incurring any obligation or liability vis-à-vis any Bidder and without expressing any cause or reason thereof, at any time and at its sole discretion amend or supplement the Tender Document and/or the selection process or the dates or other terms and conditions relating thereto, suspend and/or cancel the selection process.

17.2 BMTC reserves the right to, without limitation, without incurring any obligation or liability vis-à-vis any Bidder and without expressing any cause or reason thereof, at any time and at its sole discretion to independently disqualify, reject and/or accept any and all Bids or other information and/or evidence submitted by or on behalf of any Bidder, including without limitation pursuant to and/or in connection with receipt of a Bid after the submission deadline and/or determination that bidder will be enable to fulfil the requirements of the tender document based on the qualification criteria specified in the document.

17.3 The decisions and/or the exercise of discretion by BMTC shall not be challenged by any Bidder and are final.

17.4 Any failure by BMTC to exercise any rights hereunder, pursuant hereto and/or in connection herewith shall not be a waiver of those or any other rights unless expressly stated as such in writing by BMTC.

17.5 The Bidders and their respective officers, employees, agents and advisers must not engage in any collusive tendering, anti-competitive conduct or any other similar conduct with any other Bidder or any other entity in relation to the preparation or evaluation of Bids or otherwise in any aspect of the Works.

18 LIST OFANNEXURES

The Annexures to this document are as listed below –

Annexure-I: Scope of Work
Annexure-II: Site Description
Annexure-III: Bidder's Company Requirements
Annexure-IV: Equipment Details
Annexure-IV-A: IT Equipment Specifications
Annexure-V: Characteristics of Vehicles to be tested
Annexure-VI: Evaluation Parameters
Annexure-VII: Acceptance Criteria
Annexure-VIII: Terms of Payment
Annexure-IX: General Conditions of Contract (GCC)

19 LIST OF FORMS

The Forms to this document are as listed below –

Form a) Letter for Submission of Technical Proposal
Form b) Letter of Undertaking
Form c) Deleted
Form d) Power of Attorney Format
Form e) Performance Bank Guarantee and form of Demand
Form f) Deviations Suggested
Form g) Detailed Technical Specifications
Form h) References
Form i) Service Support
Form j) Bidder's Organization, Company Profile
Form k) Description of Approach, Methodology, Work and Training Plan
Form l) Deleted
Form m) Contact Details

Annexure-I: Scope of Work

1. General

The scope of work this tender is to set up Automated Vehicle Fitness Testing Station (ATS) at Jadigenahalli (Bengaluru), Karnataka. The detailed scope of work is as follows:

- Supply, installation & commissioning of identified test lane equipment/system including integration of test systems and system checking at ATS, Jadigenahalli (Bengaluru), Karnataka.
- Supply, installation & commissioning of necessary calibration tools, special tools and requisite software for smooth operation of the ATS with necessary reports.
- Design, construction & civil work of equipment foundations including allied services like test shed trimix flooring, epoxy coating for the flooring, conduiting for cables including 3-phase & Single phase cables & drainage, compressor piping. If compressed air is required for functioning of equipment, then availability of Compressor of requisite capacity at site will be the responsibility of Successful Bidder.
- Supply, installation & commissioning of suitable exhaust gas handling system & provision for fresh air ducting for all underbody inspection pits.
- Comprehensive Annual Maintenance Contract for 3 years after completion of warranty period of 2 years.
- Preparation of Manuals & imparting induction training and refresher training to the officers of BMTC.

The successful bidder shall be expected to complete the works by the intended completion date specified in the contract.

All bidders shall provide a preliminary description of the proposed work method and schedule, including drawings and charts, as necessary. The proposed Approach and Methodology should include programme of equipment planning and deployment duly supported with broad calculations and quality assurance procedures proposed to be adopted justifying their capability of execution and completion of work as per technical specifications, within stipulated period of completion.

2. List of Test Lane Equipment

The Test Lane Equipment required to installed& commissioned in the Automated Vehicle Fitness Testing Station (ATS) to be established at Jadigenahalli (Bengaluru) in Karnataka State are as mentioned in Table 1: List of equipment's.

Automated Vehicle Fitness Testing Station (ATS) at Jadigenahalli (Bengaluru) shall consist of 1 (One) Light commercial vehicle lane&2(Two) Heavy commercial vehicle lanes.

Technical specifications of equipment are given in **Annexure IV**.

Table 1: List of equipment's

S. No.	Equipment	QUANTITY
1	**Common Equipment**	
i	Air Compressor with all pipes and linkages	1
ii	Free Roller Set for 1 lane (Portable for testing All wheel Drive Light Commercial vehicles)	1
iii	Bogie Roller Set for 2 lanes (Embedded for testing multi-axle heavy commercial vehicles having more than one live axle)	2
iv	Toeing trolley or rail Trolley (For front wheel of 3-Wheeled vehicle)	1
v	Calibration Equipment set	1
vi	Automatic Tyre pressure filler and indicator	3
vii	Number Plate Reader Camera (as per Annexure IV-A)	3
viii	Global Positioning System enabled camera: 1 no. per lane (as per Annexure IV-A)	3
ix	Desktops (as per Annexure IV-A): 4 nos. per for administrative purpose & 3 nos. per lane for lane equipment operation (as per Annexure IV-A)	13
x	Speed dome camera (as per Annexure IV-A)	1
xi	Printer: for printing reports/certificates (as per Annexure IV-A)	3
xii	Sticker Printer (as per Annexure IV-A)	2
xiii	Token Printer	2
2	**Server, CCTV, Audio paging, Smart TV with CCTV viewer, LED displays, LAN Network** (as per Annexure IV-A)	
i	**Server:** (1 no. as a main server & 1 no. as a backup server)	2
ii	**CCTV:** 10 nos. for test shed & admin block and 2 nos. for each under body inspection pit	16
iii	**Audio paging**	1
iv	**Smart TV with CCTV viewer**	1

v	**LED displays:** 3 nos. per lane	9
vi	**LAN Network**	Necessary LAN network hardware with cables shall be provided.
3	**Light Commercial Vehicle Lane**	
i	Roller brake tester	1
ii	Suspension tester	1
iii	Side slip tester	1
iv	Joint Play tester	1
v	Electronic Steering gear play detector	1
vi	Semi- Automatic Head light tester	1
vii	Smoke meter (Opacimeter)	1
viii	Exhaust gas analyzer	1
ix	Speedometer Tester / Speed Governor Tester	1
x	Sound level Meter	1
xi	OBD scan tool	1
xii	Test fingers	1
xiii	Insulation Tester	1
4	**Heavy Commercial Vehicle Lane**	
i	Roller brake tester	2
ii	Joint Play tester	2
iii	Electronic Steering gear play detector	2
iv	Side slip tester	2
v	Semi-Automatic Head light tester	2
vi	Smoke meter (Opacimeter)	2
vii	Exhaust gas analyzer	2
viii	Speedometer Tester / Speed Governor Tester	2
ix	Sound Level Meter	2
x	OBD scan tool	2
xi	Test fingers	2
xii	Insulation Tester	2

The purpose of CCTV cameras to be installed in underbody inspection pits is to monitor & record underbody inspections being carried out by operator. CCTV footage of underbody inspections, need to be stored on central server of the ATS..

The bidder shall have total responsibility for the process including all phases of design, manufacture, assembly and functional testing of the equipment, shipment, installation, commissioning, integration of systems, training and system checking for all the elements listed in the current document. Design, construction & civil work of equipment

foundations
including allied services like test shed trimix flooring, epoxy coating for the flooring, conduiting for cables including 3-phase & Single phase cables & drainage, compressor piping will also be responsibility of the successful Bidder. Test shed floor requires excavation, earthwork and filling, labelling. Test shed trimix flooring is recommended for 18-ton design load. Electrical cables are to be insulated in U-PVC pipe. The suitable exhaust gas handling system (to take care of exhaust of the vehicle under test) is to be selected, supplied, installed & commissioned by the successful Bidder. Successful Bidder should also provide fresh air ducting for all underbody inspection pits. Necessary information such as site layout shall be provided to successful bidder before start of work execution.

All connections between the supplied elements cables & control panel are the responsibility of the successful Bidder. Each equipment shall be supplied with all cables, connectors, etc. required for the equipment operation. Cabling from control panel placed in the utility room to equipment will be responsibility of the successful bidder. Cabling from utility room to distribution panel in the test shed will be done by BMTC. The expenses of any fuel at the time of installation and commissioning of equipment have to be borne by the successful bidder.

3. Software

Bidder shall ensure the system upgradation with the latest software version free of cost for the first two years under warranty. The comprehensive AMC charges for next three years should include software upgradation charges also. The referred system upgradation shall be applicable in the event of:

- Critical releases on the software
- New Operating System adoption
- Accumulation of minor upgrades in the software
- Any changes in the test limits or test procedure or reporting requirement

If Hardware upgradation is required in order to achieve the software upgradation, this will also be included free of charge. This includes, as an example, the Computer, connections and communication cards. The supplier is also responsible for completing the tests for commissioning the upgraded software. This software should have provision to match and compile the data of any new software developed by any other agency in other ATS in the country. If any upgradation of the software system is required for integration with other external software, the supplier shall provide full cooperation and if required develop any new software which would eventually result in compilation with other software's. Hardware required for networking with other ATS should be provided by successful bidder only.
Each test lane should be designed to facilitate 3 to 4 individual test positions to achieve the maximum test throughput. In general, throughputs of minimum ten (10) vehicles per hour for the light commercial vehicle lane and minimum six (6) vehicles per hour per lane for the heavy commercial vehicle lane should be achievable with trained inspectors. The test lane instruments must be designed to achieve the required throughput and duty cycle.

Presently the Transport Department, Government of Karnataka is using VAHAN software developed by NIC for registration of vehicles. The bidder is required to integrate their system software to link with above modules for vehicle data. At the end of operation/AMC all data has to be handed over to the BMTC including software integration protocols. The bidder should also provide all integration protocols of software which are required for integration with other software's.

The appointment for fitness test at ATS shall be booked electronically, through the electronic portal (NIC's VAHAN Portal), set up by the Central Government.

The following documents and information shall be indicatively fetched / uploaded at the time of booking a slot for fitness test at ATS, namely: -

i) Registration Certificate of Vehicle, along with Form 25 of CMVR, wherever applicable;
ii) valid Insurance Certificate;
iii) last valid Permit, wherever applicable;
iv) mobile number and email ID of the registered owner or authorized signatory.

The other details related to the vehicle, not limited to the following, shall be fetched automatically from the VAHAN database, namely: -

i) Chassis Number;
ii) Engine number;
iii) Fuel;
iv) Vehicle Class;
v) Vehicle Category;
vi) Make and Model;
vii) Gross Vehicle Weight (GVW);
viii) Month and Year of Manufacture; and
ix) Speed Governor Serial Number, wherever applicable.

Software to include facility for intimation of fitness test as per appointments. This will enable operator in scheduling vehicle tests.

Lane operation software shall have security locks for operator and vehicle. At each test station, test operation will commence after scanning the operator Id. Card. & Registration plate number. Display of testing station in a test lane shall not indicate any test result. All test results shall be masked on the test lane with encrypted test data. The test report shall be generated automatically and digitally signed with relevant details, immediately after completion of all tests.

The test data and report generated shall be kept in a safe and secured facility and uploaded on the electronic portal. Photographs of vehicle and its Chassis and Engine number shall be captured by Global Positioning System enabled camera and shall be kept in a secured facility and uploaded on the electronic portal along with the tests data and report. The results shall also be integrated with VAHAN Database.

Test report so generated shall be sent to the registered owner or authorized signatory through physical and electronic mode and the test report shall include the following, namely: -

i. ATS Name and registration number;
ii. date and time of the test;
iii. vehicle details – Registration number, Type, Make and Model;
iv. visual check details;
v. measured and permissible values of functional tests;
vi. date of calibration of each equipment of the automated testing station on which tests are conducted;
vii. list of functional tests or visual checks failed by the vehicle, in case certificate of fitness is not granted.
viii. unique QR code

The vehicle test report so generated shall be as per the format given in **"Form 69 - FORM FOR VEHICLE TEST REPORT"** of CMVR as amended from time to time. Software should have the facility to print the vehicle fitness test pass sticker in the format as specified in CMVR.

4. Calibration

Each equipment shall be supplied with all the required calibration certificates.

All measuring devices shall be calibrated and traceable calibration certificates shall be available at the time of pre-dispatch inspection, and shall be included in the documentation delivered by the supplier. Calibration plan shall be included. The calibration plan shall be approved by the BMTC. Any recommendations of the BMTC shall be adhered to, by the bidder.

Arrangement of calibrated material for the pre-dispatch inspection and final acceptance is the responsibility of the equipment supplier.

Calibration tools and plan need to comply with International Standards and Accreditation, i.e. ISO/IEC 17025:2017 and / or NABL. Calibration facility and traceability to national and international laboratories should be provided.

The Smoke Meter (Opacimeter) and Exhaust Gas Analyzers shall comply with CMVR Rule 116 (3). For the remaining equipment, in case of non-availability of recognized accreditation agency, the Bidder shall submit thorough explanations on the calibration procedure used. The same shall be approved by the BMTC. Any changes/ recommendations of the BMTC shall be adhered to, by the bidder at no extra cost to the BMTC.

Calibration equipment as described in Annexure IV, shall also be available with the Bidder in order to maintain the required performances of all the testing equipment included in this tender. The equipment should not operate if its calibration due date

is over or its next calibration due date is not updated in the software. The interlock

for the same should be provided in the software.

5. Climatic Conditions

The bidder is responsible for the declared performances to be reached under the climatic condition appearing in "**Annexure II - Site Description".**

6. Health & Environmental Requirements

All above equipment's must meet the Environmental, Health and Safety aspects (CE or equivalent). Certificates shall be included in the Documentation. If hazardous material is used, please provide MSDS (Material Safety Data Sheet).

7. Documentation

At the time of equipment delivery, the supplier is required to provide, for each equipment, manuals in English, Hindi & Kannada languages containing: description of the equipment with detailed drawings, instructions on the operation of the system, detailed software control commands, safety systems, calibration plan and procedure, full maintenance plan and procedure details.

Calibration certificates shall be included in the documentation.

Documentation shall be delivered in Two Hard Copies and in Soft Copies (in two pen- drives).

8. Construction of Equipment Foundations including flooring & Installation of equipment

The successful Bidder shall deploy an Implementation Team with demonstrable skills and experience in order to achieve the requested quality of Design, construction & civil work of equipment foundations including allied services like test shed trimix flooring, epoxy coating for the flooring, conduiting for cables including 3-phase & Single phase cables & drainage, compressor piping, exhaust gas handling system (to take care of exhaust of the vehicle under test), fresh air ducting for all underbody inspection pits & Installation of test lane equipment.

The bidder is required to prepare and submit the MS Project plan covering all the activities envisaged in the project.

This implementation plan shall be included in document "Form k) - Description of Approach, Methodology and Work Plan"

Bidder shall clearly explain the steps to be followed for implementation of the ATS lanes,

detailing the work team involved at each stage and the requirements from BMTC in "Form k) - Description of Approach, Methodology and Work Plan"

The Bidder is also required to deliver, together with its offer, a typical implementation layout. The layout should consider site conditions, utilities, expected throughput and optimized cost of operation.

The Bidder for this tender is responsible for any interface with the Civil Works and General Utilities appearing in the document "Annexure II - Sites Description". The successful Bidder shall also specify any special requirement on the civil works and utilities in "Form k) - Description of Approach, Methodology, Work and Plan", as per the document "Annexure II - Sites Description".

All the civil work of equipment foundations will be executed by successful bidder as per KPWD / CPWD norms. Wherever KPWD / CPWD norms are not applicable, the successful bidder will take consent from BMTC for execution of civil work of equipment foundations. Thickness of Epoxy coating should be at least 3 mm. Color scheme for epoxy coating of test shed flooring will be provided by BMTC.

9. Pre-dispatch Inspection and Acceptance Tests

Pre-dispatch inspection of the equipment to be supplied shall be performed in the presence of a team of 4– 5 persons as decided by BMTC for a period of one week. All arrangement in consultation with BMTC shall be made by the bidder. Bidder shall be responsible for all the costs towards inspection, Travel, Lodging and Boarding of the team etc. These tests shall be carried out at the Bidder's premises, as per "**Annexure VII - Acceptance Criteria**". Certificates of calibration from recognized accreditation agency, as per **"Annexure VII - Acceptance Criteria"** shall be submitted. If re-inspection by the team is required by any circumstances, total expenses for revisit shall be borne by the successful bidder.

Demonstration of the performance of the supplied equipment shall be performed as per tests described in **"Annexure VII - Acceptance Criteria".** The successful bidder shall provide detailed acceptance procedure during the design review meeting.

10. Exhaust Gas HandlingSystem

Suitable exhaust gas handling system (to take care of exhaust of the vehicle under test) is to be selected, supplied, installed & commissioned by the bidder. The exhaust gas handling system shall maintain proper ventilation inside the test shed.

Minimum requirements of Exhaust gas handling system are as follows.

- **LCV Lane:**

  Vehicle Exhaust Flow: 550m^3/hr

  Vehicle Exhaust Temperature: 80ºC to 100ºC
- **HCV lane:**

Vehicle Exhaust Flow: 1500m^3/hr
Vehicle Exhaust Temperature: 100ºC to 110ºC

Blower should be designed considering above vehicle exhaust flow & temperature. Dilution of the vehicle exhaust should be carried out considering vehicle exhaust temperature. Suitable extraction unit should be provided along with each blower. Suction Velocity of exhaust at the end of extraction unit is to be in the range of 13-15 m/s. Suitable standard flexible hoses with required length need to be provided. While all blowers in working condition, noise level should be below 80dB inside the test shed.

Bidder should also provide fresh air ducting for all underbody inspection pits.

11. Automated Vehicle Fitness Testing Station (ATS) related Procedures

The bidder is required to establish QA/QC document for following operations:

- Test procedures for testing vehicles in the lane
- Calibration procedure and plan
- Maintenance procedure and plan
- Data Management (Data storage, mining, archiving, etc.) &Networking
- Optimization for vehicle throughput, detail flow of the Testing process to be followed including customer handling process

1. Trainings

1.1. Bidder should have in-house team for providing training to inspectors, other staff and DoT officials for inspection. In addition to English and Hindi, Bidder is required to provide training in Kannada language.
1.2. Bidder should have in-house team to provide update trainings as and when required for the operators and inspectors.

2. Operation procedures
2.1. Bidder should have duly defined Operation procedures for inspecting and testing of vehicles.
2.2. The standard operating procedure of the ATS shall be displayed in the waiting area for public as well as staff.
1.1. Bidder should provide manuals in English, Hindi and Kannada languages for testing and inspection of vehicles in soft copy and hardcopies.

5. Calibration
5.1. Bidder should have a scheduled calibration and maintenance plan for the equipment's.
5.2. Bidder is also required to maintain the inventory of tools and consumable items to be used in calibration of equipment's.
5.3. Bidder should clearly define the calibration and test procedure for the equipment's.

For all the above points, the details shall be submitted to the BMTC for approval before the commissioning. Any changes / recommendations suggested by the BMTC shall be adhered to.

6. Spare parts Management
   6.1. Bidder should keep the inventory of the spare parts required for the smooth running of operations.

7. Software – Bidder should have their own software which should have the following features.

   7.1. Software management–
      7.1.1. Bidder should have their own software to be installed on the LAN.
      7.1.2. Bidder should be able to maintain and manage their software.
      7.1.3. Bidder should be able to update the software free of cost as and when required i.e. whenever there is any kind of change in Chapter XI of Central Motor Vehicle Rule for Recognition, Regulation and Control of Automated Testing Station and under Karnataka Motor Vehicles Rules (KMVR) or any modification in software is required for meeting testing requirements and provide all necessary integration software details including the necessary API and the SDK to BMTC or their authorized representatives.

   7.2. Data management–

      7.2.1. Bidder should be able to do data management in the software like data storage, mining, archiving etc.

      Successful Bidder shall setup required server at ATS to store all the information centrally. The central server shall be able to display information centrally to the BMTC / Transport Commissioner's office in real-time.

      7.2.2. The data generation, processing and storage shall be done in a manner so as to ensure that, -
         7.2.2.1. the database is stored in a data management software platform to enable easy exchange and analysis of data with other platforms;
         7.2.2.2. all automated test results shall be automatically transmitted to a server installed in the ATS and visual checks data, including photographs, shall also be transferred on the same server; (read with Annexure 4 – visual inspection)
         7.2.2.3. the fitness criteria for pass or fail shall be automatic and in accordance with Central Motor Vehicle rule 1989.

8. Test Runs – Bidder should periodically carry out in service checks on a defined frequency on all lanes to ensure smooth and correct running for lanes without hampering the routine operations.

12. Warranty, Technical Service and Maintenance

Since the operation of the ATS will have to be done by the Bidder, all responsibility of Warranty and Maintenance will have to be borne by the Bidder to the satisfaction of BMTC. Inability of checking vehicles in a particular test lane will be considered as break-down and any machine in a test lane should not break-down for more than 24 hrs. and none of the test lanes should be non-operational for more than 100 hours per year.

The Bidder is expected to perform at a throughput efficiency of typically minimum Six (6) vehicles per hour for Heavy Commercial Vehicle Lanes and minimum Ten (10) vehicles per hour for Light Commercial Vehicle Lanes capable of 24x7 operations.

In case the lane is non-operational due to breakdown of any equipment, it could result in Penalizing the Operator of the ATS as mentioned in Clause 12.2 below.

The requirements for the Service Support are

12.1 Service Support

The Bidder is required to have a service support set up in India, preferably in the state of Karnataka with sufficient trained manpower.

The Bidder shall commit a maximum response time of 24 hours after the breakdown is reported by the BMTC representative which is accepted by the Bidders' operator or Technician, which means that in case of any breakdown within 24 hours, the Bidder's personnel should reach the site, assess the cause of the breakdown and take necessary action to resolve the issue.

The Bidder is requested to fill the corresponding part of **"Form i) Service Support".**

12.2 Warranty

The Bidder shall be required to provide a comprehensive warranty of minimum two years after completion of successful installation and commissioning at site, for equipment supplied under this tender, including the following -

Bidder shall commit 95% of uptime.
Any preventive maintenance and / or repair for breakdown shall be carried out by the Bidder at his own cost during warranty period. No charge on this account (including cost of calibration, spare parts, wear parts, consumables to be changed during maintenance, travel and accommodation expenses, etc.) will be borne by BMTC.
The preventive maintenance will be carried out by bidder, at a frequency specified by the Bidder at time of Technical Bid Submission. Any suggestions
/ directions in this regard of the BMTC shall be adhered to. Every three months, the bidder's representative will be required to inspect the equipment and submit a report on overall health & maintenance status of the equipment.
In case a lane is non-operational / partially operational (i.e. not fully operational) for

more than 100 hours in a year, Rs. 1000 charges per hour/per non-operational lane would be deducted from the subsequent bill of operations of next month. This clause is pertaining to non-operation / partial operation of lanes due to breakdown of one or more lane equipment, unavailability of one or more manpower, spare parts, utilities or any other operation related issues.

As required in the conditions above, the Bidder shall include under the Warranty conditions both preventive and corrective maintenance during the Warranty period. This includes all scheduled preventive maintenance, as well as assistance in case of breakdown, not limited to the scheduled visits, but committing to the 24 hours response time after breakdown is reported by BMTC representative and accepted by Bidders' operator / technician operating the ATS, independently from the cause of the breakdown. Both spare parts and labour shall be covered by these conditions in case of breakdown happening due to normal use of the facilities, and in no case BMTC shall be charged for labour costs or spare part cost or any other costs associated to any kind of breakdown during this Warranty period.

The Bidder is requested to fill the corresponding part of "Form i) Service Support", explicitly stating his agreement with each and all of the above conditions.

Successful Bidder shall be responsible for maintaining the above requirements for the entire period of contract without exception. Successful Bidder shall ensure that during the entire contract period, all equipment are supported by OEM warranty support. Any equipment approaching end of life cycle as per its OEM's policy, should be replaced with new equipment, at no extra cost to BMTC. Any technology upgrade, replacement of hardware, software etc. required for the same, shall be provided by Successful Bidder at no extra cost to BMTC.

The maximum penalty per quarter for the Successful Bidder shall be limited to 5% of the total monthly billing. Beyond such limit, BMTC reserves right to consider it has reached "Breach Level". Post which, BMTC reserves right to invoke Termination Clause. The maximum penalty for entire project period shall be limited to 2% of total project cost. Post which, BMTC reserves right to invoke Termination Clause.

.

12.3 Comprehensive Annual Maintenance Contract(AMC)

The bidder will be responsible for providing 3 years Comprehensive AMC services after completion of initial 2 years' warranty period. With all Terms & Conditions same as Warranty except the payment schedule which is as per 4(a) of Annexure-VIII: Terms of Payment.

12.4 Spares, Consumables & Wear Parts

The Bidder is required to have critical / essential spare parts stored in India. The Bidder shall be required to provide a list of critical / essential spare parts (not consumables) without prices (to be included in **"Form i) Service Support").**

The bidder shall provide the list of the consumables including the quantity required per year during the Technical Bid submission.

13. Training Support

13.1 Pre-dispatch inspection training

Two training courses shall be included in the offer. These two courses will happen at the Bidder's site during pre-acceptance tests.

- Operational training shall include basics and functioning of the system, system design and the flow schematics, system functions and parameterization, operation and troubleshooting.
- Maintenance training shall include maintenance of the system and Utilities interface.

Operational training shall be based on the same kind of system (software release and functions) to be supplied to BMTC for ATS. Maintenance training shall be based on the same actual equipment to be shipped and installed at ATS.

The offer shall include the full training costs described above, for 4-5 persons for a period of one week. Travelling, boarding, lodging and incidental costs shall be borne by the Successful Bidder.

13.2 Induction training and refresher training

During installation & commissioning of equipment at ATS, induction training should be imparted to the BMTC officers. Induction training should include class-room training & on-job training based on the actual equipment installed at ATS along with maintenance training.

Additionally, for a period of one month as directed by BMTC, the bidder should organize a refresher training for the BMTC Officers. The refresher training should cover training on operation of equipment, regular maintenance of equipment & utilities, lane operation & management software & overall management of ATS.

14. Timelines

The successful bidder shall deploy an Implementation Team with demonstrable skills and experience in order to achieve the Timelines mentioned in the table below:

Sr. No.	Activities	Timelines for the Bidder
1.	Release of work order	M1
2.	Design, construction & civil work of equipment foundations including allied services like test shed trimix flooring, conduiting for cables including 3-phase & Single phase cables & drainage,	Within 5 (Five) months from release of work order

	compressor piping and fresh air ducting for all underbody inspection pits	
3.	Pre-dispatch Inspection of equipment at Original Equipment Manufacturer (OEM) site	1 (one) month prior to dispatch of equipment
4.	Delivery of equipment & Exhaust Gas Handling System at site	Within 5 (five) months from the release of work order
5.	Installation of equipment& Exhaust Gas Handling System at site	Within 2 (two) weeks after delivery of equipment at site
6.	Epoxy coating for the flooring	Within 2 (two) weeks after installation of equipment
7.	Commissioning & acceptance of equipment& Exhaust Gas Handling System at site	Within 2 (two) weeks after completion of epoxy painting of Test shed floor
8.	Induction training of staff deputed by BMTC	Immediately after successful completion of commissioning & acceptance of equipment and getting the authorization letter from Transport Department, Government of Karnataka

Annexure-II: Site Description

This document is intended to provide additional information to the bidder on the general description of the Automate Testing Station.

The Bidder is requested to include along with his offer a proposal for the implementation of the equipment, by pasting a detailed layout for each Test Lane in **"Form k)".**

1. General Description

1.1 Operating Conditions at ATS

Temperature	+10˚C to +45˚C
Humidity (RH)	55 to 95 %

The Automated Vehicle Fitness Testing Station will either be a steel structure and concrete building or Pre Engineered Building (PEB) Structure. The building will have **One inspection lane** catering to testing of **Light Commercial Vehicles** upto 3.5 tons GVW including Three Wheelers & Taxis and **Two inspection lanes** for testing **Medium and Heavy Commercial Vehicles** above 3.5 ton GVW.

Electricity: Power available at site

- Three phase: AC 415 V +/- 10 % and 50Hz +/- 1
- Single phase: AC 230 V +/- 10 % and 50Hz +/- 1

Diesel generator back up will be made available at the site.

1.2 Available Utilities

Bidder is required to give the details of power, cabling, foundation details, server room and LAN, material handling, utility requirement such as compressed air, water, UPS, lux requirement in the ATS, earthing, ventilation. All the required utilities such as DG set, Transformer, compressors, UPS, Air conditioners etc. will be provided by BMTC in the ATS.

1.3 Bidder is required to provide good for construction drawings (GFC)

1.4 Bidder is required to specify special safety requirements if any.

Annexure-III: Bidder's Company Requirement

1. Bidder's Companyrequirements

1.1 Bidder

The bidder or his consortium (called as "Bidder") is the company which has sufficient knowledge of establishment of Automated Vehicle Fitness Testing Station (ATS) and have the capability to supply complete value of the tender. In case the minority of the value of the Tender is outsourced, the Bidder should be able to provide documental evidence of possessing a formal agreement with the company outsourced (supporting documents to be submitted along with the tender). The bidder would be the purchaser of the tender document and BMTC would interact only with this bidder in terms of entertaining him for tender document clarifications, evaluating him and considering him for selection, award of contract and the subsequent execution of the contract.

1.2 Consortium

In case of Consortium, the maximum no. of members are restricted to three only and one out of three members must be defined as leader, who will be considered as Bidder for the tender. The OEM of major equipment (at least roller brake tester, side slip tester, suspension tester, Speedometer tester and axle weight measuring equipment) shall be part of the consortium. The lead bidder of consortium should have office in India with valid GST number. The information about the Consortium needs to be furnished as per Form j).

- No bidder applying individually, or as a member of a Consortium, as the case may be, can be member of another consortia bidding for the project.
- The tender form shall be submitted only in the name of the Lead bidder and not in the name of any consortium member. EMD shall be submitted only by the lead bidder and not by the consortium member.
- A copy of Memorandum of Understanding (MOU) executed by the Consortium members shall be submitted by the lead bidder along with the tender. The complete details of the members of the Consortium, their share and responsibility in the Consortium etc. particularly with reference to financial, technical and other obligations shall be furnished in the MOU.
- Once the tender is submitted, the MOU shall not be modified / altered / terminated during the validity of the tender. In case the tenderer fails to observe/comply with this stipulation, the full Earnest Money Deposit (EMD) shall be liable to be forfeited.
- After the contract has been awarded, alteration / change in the constitution of Consortium shall not be allowed during the current contract period.
- On issue of LoA (Letter of Award), an agreement among the members of the Consortium (to whom the work has been awarded) shall be executed and got registered before the Registrar of the Companies under Companies Act or before

the Registrar/Sub-Registrar under the Registration Act, 1908. This Agreement shall be submitted by the Consortium to BMTC before signing the

- Service Level Agreement for the work. In case the tenderer fails to observe/comply with this stipulation, the full Earnest Money Deposit (EMD) shall be forfeited and other penal actions due shall be taken against the selected bidder. This Joint Venture Agreement shall have, inter-alia, following Clauses:

  - ❖ Joint and Several Liability - Members of the Consortium to which the contract is awarded, shall be jointly and severally liable to BMTC for execution of the project in accordance with General and Special Conditions of Contract. The Consortium members shall also be liable jointly and severally for the loss, Damages caused to BMTC during the course of execution of the contract or due to non-execution of the contract or part thereof.

  - ❖ Duration of the Agreement - It shall be valid during the entire duration of the contract including the period of extension, if any and the maintenance period after the work is completed.

  - ❖ Governing Laws - The Agreement shall in all respect be governed by and interpreted in accordance with Indian Laws – Jurisdiction in Bengaluru only.

  - ❖ Authorized Member - Consortium members shall authorize Lead bidder on behalf of the Consortium to deal with the tender, sign the agreement or enter into contract in respect of the said tender, to receive payment, to witness joint measurement of work done, to sign measurement books and similar such action in respect of the said tender/contract. All notices/correspondences with respect to the contract would be sent only to this authorized member of the Consortium..

- No member of the Consortium shall have the right to assign or transfer the interest right or liability in the contract without the written consent of the other members and that of BMTC in respect of the said tender/contract.

- Members of the Consortium shall submit a declaration in MoU consisting of the following:
  1. Committed to the scope of work, rights, obligations and liabilities to be held by each member; specifically committed that the Lead bidder shall be answerable on behalf of other members for the performance of obligations under this Agreement.
  2. Undertake that each of the members of the Consortium, shall have a definite and clarity of scope of work which was allocated as per each member's field of expertise.
  3. Brief description of the roles and responsibilities of individual members; and clearly define the proposed administrative arrangements (organization chart) for the management and execution.
  4. All the members of the Consortium shall be jointly and severally liable for all obligations in relation to the Agreement/Contract until the completion of the project in accordance with the Agreement.

1.3 Supporting documents mentioned in below table shall be uploaded along with Technical bid.

Sr. No.	Parameters	Requirement	Supporting Documents
1	**Legal Entity**	• Bidder (Lead Bidder in case of consortium) should be a company incorporated in India under the Companies Act, 1956/2013 OR LLP firm under LLP provisions 2008, both as amended from time to time and should have been established for the last five years in India (including name change / impact of mergers or acquisitions) and shall have a valid GST number. • Other members in case of consortium, should be a company incorporated in India or anywhere in world under the Companies Act, 1956/2013 OR LLP firm under LLP provisions 2008, both as amended from time to time OR Incorporation of company as per law of country of origin.	For Bidder (Lead Bidder of consortium): • Copy of Certificate of Incorporation Registration under Companies Act 1956/2013 OR Registered Limited Liability Partnership deed as applicable • Copy of Certificates of incorporation, Articles of Association (AOA) and / or Memorandum of Association (MOA) clearly specifying legal entity & type of business undertaking mentioning the relevant scope. • The last five years Income Tax returns along with the copy of PAN Number. • Copy of Registration Certificates with the GST Authorities • Documentary proof such as purchase orders or certified true copy of balance sheet and PL statements for last five years for operation in India as on the date of publishing of tender notice. For other members in case of consortium: • Copy of Certificate of Incorporation Registration under Companies Act 1956/2013 OR Registered Limited Liability Partnership deed as applicable OR as per law of country of origin of company from all members. • Copy of Certificates of incorporation, Articles of Association (AOA) and / or Memorandum of Association (MOA) clearly specifying legal entity & type of business

			undertaking mentioning the relevant scope. • Registration and Tax returns for last five years along with the copy of Registration Certificate issued by Competent Authority. • Documentary proof such as purchase orders or certified true copy of balance sheet and PL statements for last 5 years for operation in India or anywhere in world as on the date of publishing of tender notice.
2	**Financial: Turnover**	Lead B 2018-19, 2019-20, 2020-21, 2021-22 2022-23 & 2023-24) of minimum **INR 10 Crore.** In case of Turnover submitted from other country, the same shall be calculated as per conversion rate as on date of publishing of this tender and the same shall be apostilled.	• Certificate from the Statutory Auditor/ Chartered Accountant. • Copies of Audited Financial Statements of last 5 Financial Years In case Chartered Accountant certificate is submitted the said certificate also need to be countersigned by Company Secretary/ authorized signatory of the bidder. In case the Lead Bidder is the subsidiary, fully owned by a Group, then the turnover of the parent company would be admissible for consideration, provided authorization from the parent company is submitted. Above documents for Lead Bidder shall be from Indian Statutory Auditor, Chartered Accountant and Company Secretary.
3	**Financial: Net Worth**	Bidder **(**All members in case of consortium) should have **positive net worth** as per the audited consolidated financial statements as on 31st March 2024. In case of net worth submitted from other country, the same shall be calculated as per	• Certificate from the Statutory Auditor/ CA clearly specifying the net worth of the firm. • Audited and Certified Balance Sheet and Profit/Loss Account of last 5 Financial Years In case Chartered Accountant certificate is submitted the said certificate also need to be counter

		conversion rate as on date of publishing of this tender and the same shall be apostilled. **Net worth shall be calculated as per below formula:** (Paid up share capital) + {(Free reserves - Share premium) + Share premium of listed companies)} - (Revaluation of reserves) - (Intangible assets) - (Miscellaneous expenditure to the extent not written off and carry forward losses)	signed by Company Secretary / authorized signatory of the bidder. Above documents for Lead Bidder shall be from Indian Statutory Auditor, Chartered Accountant and Company Secretary.
4	**Bidder's Experience**	The Bidder should also have satisfactorily completed the works as mentioned below during the last Five (5) years ending previous day of last date of submission of tender. Bidder's (all members in case of consortium) experience as individually or collectively shall be as follows: • **Having manufactured and supplied at least 2 test lanes to one completed project in last five years**. Test Lane equipment manufactured & supplied must comprise of at least roller brake tester, side slip tester, suspension tester, speedometer tester and axle weight measuring equipment.	The bidder shall submit a proof (notary certified copy of the original Work done completion certificates issued by the Government authority /Authorized Government Operator of the Inspection stations and counter signed by the Bidder) of such a business worldwide. This in formation shall be provided in **"Form j) Bidder's Organization, Company Profile.".** Bidder is requested to provide a full list of such projects in **"Form h) References",** under the chapter **"Similar References"**, where Bidder shall have successfully manufactured & supplied Test lane equipment for Inspection stations. The references may be turn-key projects, where the Bidder had full responsibility to set-up the complete station. The Bidder is requested to submit detailed information on those projects in **"Form h) References"**, under the chapter **"Government Approved References"**.

5	**Blacklisting**	**The Bidder (all the members of Consortium)** should not have been blacklisted/ debarred by any Central Government and Department / State Government and Department / Central or state Public Sector Unit / Urban Local Bodies / Defence / Govt. Boards in India or any other country as on last date of submission of bid either in their individual capacity as members of the Consortium or the Consortium in which they were/are members from participation in tenders/contract.	• Undertaking by the authorized signatory of bidder (All members in case of Consortium).
6	• Notary certified copy of resolutions of the Directors of the Company, permitting the company to enter into an agreement, authorizing MD or one of the Directors or Managers of the Company to sign Agreement, such other documents required to be signed on behalf of the Company and enter into liability against the company and/or do any other act on behalf of the company. • Power of Attorney (duly registered as per prevailing law) by the Company authorizing the person to do/act mentioned in the para above.		
7	**Bidder's Organization and Company Profile**	B Bidder is required to provide the information about him as per **"Form j)–Bidder's Organization, Company Profile and consortium".**	
8	If documents are in language other than English, then both, original document & notarized copy of its English translation need to be submitted.		

Annexure-IV: Equipment Details

1. FUNCTIONALREQUIREMENTS

The bidder shall have total responsibility for the process including all phases of design, manufacture, assembly and functional testing of the equipment prior to shipment, installation, system checking and functional testing after installation for all its capabilities.
The inspection equipment to be installed is meant to check the correct functioning of all the components of the vehicles involved in the safety of the occupants and the compliance with the emission regulations including meeting all requirements of periodical technical inspection for roadworthiness for in-use vehicles as per Central Motor Vehicles Rules (CMVR), Government of India and Karnataka Motor Vehicles Rules (KMVR).
The test systems shall require flexibility to facilitate easy implementation of new test functionality, modifications for changes of the law and new vehicle functionality over the life of the test systems.

1.1 General Purpose of the inspection lane

The purpose of the testing lane is to perform all the tests needed in a standard vehicle inspection station covering all CMVR requirements. All the equipment defined in this document shall be capable to test the types of vehicles mentioned below, especially listed in **Annexure V.**

The technical specifications include requirements for overall test performance, test lane layout, equipment interfacing, lane throughput and data networking.

1.2 Tests to be performed

The vehicles to be inspected in the facilities shall be divided into:

- Three wheelers
- Quadricycles
- Passenger Cars (PC) /Taxis
- Light Commercial Vehicles (LCV)
- Medium Commercial Vehicles (MCV)
- Heavy Commercial Vehicles (HCV)

The main tests to be performed are:

- Measurement of braking force in the wheels of each specific axle: To be performed on 3W, Quadricycles, PC, LCV, MCV & HCV on the Roller Brake Tester.
- Check of the behavior of the suspension system in each one of the vehicle's axles for vehicle upto 3.5 tons GVW excluding 3W: To be performed on the Suspension Tester.
- Measurement of convergence and divergence between the wheels of the same axle: To be performed on Quadricycles, PC, LCV, MCV & HCV on the Side Slip Tester.
- Inspection of the tolerance existing between the different devices linked with the wheels
- i.e. all steering joints & suspension joints connected to the wheels of vehicle should be inspected. Excessive wear & tear of ball joints & any kind of leakage of oil through these joints should be inspected: To be performed on Quadricycles, PC, LCV, MCV& HCV on the Joint Play Tester.
- Head lamp beam alignment check: To be performed on Quadricycles, PC, LCV, MCV & HCV using the Semi-Automatic Head Light Tester.
-
- Measurement of exhaust gas opacity in diesel engines: To be performed on 3W, Quadricycles, PC, LCV, MCV & HCV using Smoke Meter (Opacimeter) as per CMVR 115 (2).
- Measurement of specific components generated in the exhaust gas in Gasoline/ CNG / LPG engine vehicles: To be performed on 3W, Quadricycles, PC, LCV, MCV & HCV using the Exhaust Gas Analyzer per CMVR 115 (2).
- Vehicle Speedometer inspection: To be performed on 3W, Quadricycles, PC, LCV, MCV & HCV using the Speedometer tester.

- Visual inspection as specified in the Table-D of Chapter XI of Central Motor Vehicle Rule for Recognition, Regulation and Control of Automated Testing Station: To be performed on 3W, Quadricycles, PC, LCV, MCV & HCV.
- Stationary noise measurement to be performed on 3W, Quadricycles, PC, LCV, MCV & HCV using Sound Level meter.
- Protection against Electric Shock: To be performed on Electric & Hybrid Electric vehicles only using IP XXB & IP XXD. Refer AIS-038 (Rev. 1 & Rev. 2): 2015 for detailed explanation on Test fingers.
- Insulation Resistance Measurement Test: To be performed on Electric & Hybrid Electric vehicles only using Insulation Tester

1.3 Test configuration

1.3.1. Inspection sequence LCV Lane

For e.g.

Administration Process

1. Document Verification
2. Booking of the appointment for Vehicle fitness test (Online)
3. Collection of fee (Online)
4. Issue of token

Station 1.

1. RFID Authentication of Operator
2. Emission Test
3. Horn Test
4. Exhaust Noise Test
5. Speedometer Test
6. Speed Governor Test

Station 2.

1. RFID Authentication of Operator
2. Side Slip Test
3. Suspension Test
4. Service Brake & Parking Brake Test
5. Protection against Electric Shock (For Electric & Hybrid Electric vehicles only)
6. Insulation Resistance Measurement Test (For Electric & Hybrid Electric vehicles only)
7. State of Charge (SOC) Indicator on Dashboard (For Electric vehicles only)

Station 3.

1. RFID Authentication of Operator
2. Under Body Visual Inspection using joint play tester
3. Steering Angle test
4. Head light test

Administration Process

1. Issue of Report and return of the Token

Bidder can suggest his own sequence of operation to be duly approved by BMTC in writing.

1.3.2. Inspection sequence HCV Lane

For e.g.

Administration Process

1. Document Verification
2. Booking of the appointment for Vehicle fitness test(Online)
3. Collection of fee (Online)
4. Issue of token.

Station1.

1. RFID Authentication of Operator
2. Emission Test
3. Horn Test
4. Exhaust Noise Test
5. Speedometer Test
6. Speed Governor Test

Station 2.

1. RFID Authentication of Operator
2. Side Slip Test
3. Service Brake & Parking Brake Test
4. Protection against Electric Shock (For Electric & Hybrid Electric vehicles only)
5. Insulation Resistance Measurement Test (For Electric & Hybrid Electric vehicles only)
6. State of Charge (SOC) Indicator on Dashboard (For Electric vehicles only)

Station 3.

1. RFID Authentication of Operator
2. Under Body Visual Inspection using joint play tester
3. Steering Angle test
4. Head light test

Administration Process

1. Issue of Report and return of the Token.

Bidder can suggest his own sequence of operation to be duly approved by BMTC in writing.

1.4 IT Platform

The equipment described in this document shall comply with the following requirements:

- Selection of vehicle category as defined above such as 3-W/ Multi-axle vehicles etc.
- Data Acquisition and results shall be performed directly by the equipment and its control computer and sent to a central storage PC for final evaluation without the intervention of the user.
- All results shall be traceable, with information on the operator involved in each test and step of the inspection process.
- The data and traceability shall be secured, and a record of the actions made, and the results obtained shall not be editable and should be tamperproof.
- The storage of all data and results shall be secured and shall not be

-
- physically accessible by the users/operators. The central server in the station should have access to all the data generated from the test lanes in a structured manner as may be decided by BMTC from time to time.
- For data transfer between VAHAN & Vehicle Inspection Management Software (VIMS) / Lane Management Software, local server should be available at the ATS. After a testing of vehicle, data store on local server need to be uploaded on VAHAN platform. The vehicle test report so generated shall be as per the format given in "Form 69 - FORM FOR VEHICLE TEST REPORT" of CMVR as amended from time to time.

Minimum hardware requirements: PC per station, upgradability for additional lanes/test benches. LAN or higher communicating networks, server with sufficient and reliable storage capacity, Printer/s for test report printing & Sticker printing etc.

Each station must have capability of reading RFID/smart card/equivalent device. Operation of each test at every station must be remotely operated so as to minimize operator's physical movement.

Capability for fine tuning the test procedures shall be included. When access granted by the higher authority, calculations and procedures, limit values and all test parameters shall be customizable and storable.

Various MIS reports need to be generated for BMTC. Format of these reports would be finalized during design review.

Advanced operations on the data management system shall be done from central server in a remote area. The system shall be based on the Windows Operating System. For report generation printer shall be provided and the server room shall also have a printer.

The software shall have the calibration and maintenance plan for each equipment of the lane incorporated. The software shall display the same at the computer to inform the lane operator for the same in advance by display warning signals. All the test measurements should be done only when the calibration of equipment is valid. The calibration data shall be stored in the central computer. All measurements shall be in Metric System. Measured value of each test needs to be provided in the test report along with permissible range.

The bidder is required to submit the ATS layout diagram along with all the required equipment's like RFID/Smart card Reader, Individual PC at test lane station, CCTV, Audio paging at ATS, Operator ID (RFID/ IR) sensor at each station of lane, Digital Camera at test shed entry point, Hand Held Terminal (HHT) for under-body visual inspection (iPad / Tab) need to be communicated to the main control PC, central server with sufficient storage system etc. to the BMTC.

In the absence of dedicated cycle and procedures for loaded mode testing in Indian scenario, it has been decided to incorporate dynamometers for loaded mode emission

test at later stage in the same ATS. Therefore, the bidder is required to cater the provision for installing the dynamometers for loaded mode emission test in future.

The specification of PC and server has been indicated at **Annexure-IVA.**

2. TECHNICAL DESCRIPTION

There shall be 1 (One) LCV lane capable of testing Light commercial vehicles upto 3.5 tons GVW and PassengerCarsand2 (Two) HCV lanes capable of testing MCV's and HCVs in the ATS.

- Light commercial vehicles (vehicles less than or equal to 3500 kg GVW) – 1 (One) LCV lane
- Heavy commercial vehicles (vehicles above 3500 kg GVW) – 2 (Two) HCV lanes

The station, devoted to the inspection of 3-wheelers, Quadricycles, Passenger Cars, Light commercial vehicles, Medium commercial vehicles and Heavy commercial vehicles, shall have at least the following equipment and shall fulfil the following requirements.

2.1 Technical Specifications

The equipment used at the ATS shall be capable of measuring maximum safe axle weight as notified under section 58 of the Motor Vehicle Act as amended from time to time.

The equipment shall be able to test all categories of vehicle under fitness regime.

The software of the equipment shall allow modification in the inspection system as required by the registering authority / BMTC.

All equipment shall be able to operate in the following environmental conditions, namely: -

(i) Temperature range: 0°C to 55°C;
(ii) Humidity: up to 95%;
(iii) Dust: Typical Indian testing condition.

All the supplied equipment shall be designed to meet the following good engineering criteria:

- shall be easy to use,
- shall allow improvements and upgradation and
- shall have a low maintenance cost.

Force application system shall be either Pneumatic or Hydraulic type. Metric units shall be used.

2.2 Common Equipment

The equipment described in this chapter is only used in some cases. Therefore, it will be shared by all the lines in the ATS.

2.2.1 Air Compressor

Sl. No.	Description	General Requirement
1	Type	Rotary Screw Type
2	Cooling Media	Air Cooled
3	Free Air density (CFM)	(22±10%) Cfm
4	Working Pressure	10 bar
5	Drive	Belt drive (without Coupling)
6	Noise Level(dB)	64 db±5%
7	Nominal Power & Standard Electrical	400V ±10%, 3 phase with Neutral
8	Controls	Microprocessor based regulator to be mounted at one side of compressor and this comprises with electronic intelligence with all safety interlock, compressor status indicators, compressor warning & shutdown indicators, Automatic operation with energy saving.ES99
9	Ambient Temperature	Min.: 2 ˚ C Max. : 49˚ C
10	Receiver Tank Capacity (ltrs.) at 10 bar working pressure	200±20%
11	Paint Color of Cylinder	As per IS:4379
12	Acoustic Canopy & drive arrangement	Compressor package is enclosed in a powder coated acoustic canopy with sound absorbing material for limiting the noise level, avoids entry for dust particles in the element, anti-vibration mounts support electric motor and compressor unit and isolate the moving components from rest of the structure.
13	Performance Parameters	All performance parameters with tolerances as per Indian Standards. (Ultrasonic test & Hydro test valid certificates from the standard authority are mandatory)
14	Genuine Spares	Details to be given along with the frequency of the replacement of each part.
15	Air Dryer	Refrigerant type of (22±10%) Cfm free air

		density standby and with auto drain. Dew Point achievable equal to 2˚C.

2.2.2 Free Roller Set

Device used to perform correctly Speedometer Tests on All Wheel Drive LCV vehicles. Description:
The device shall be portable to accommodate large variations in wheelbase of the vehicle.
It shall allow driven axels to turn without touching the floor. It shall be composed of a chassis with free turning wheels mounted onto it.

The device shall be designed to ensure safety of nearby people and vehicles so a proper restraint system shall be proposed.

2.2.3 Bogie Roller Set

Device used to perform correctly Roller Brake Tests or Speedometer Tests on multi-axle HCV with more than one live axle.

Description:

Proper braking mechanism for locking of rollers during exit of vehicle shall be provided.
The bogie rollers are to be suitably designed to accommodate varying distances between axles and are to be embedded suitably to test both brake and speedometer.

2.2.4 Toeing Trolley or Rail Trolley (for front wheel of 3-Wheeled vehicle)

- Toeing trolley should be capable of safe movement of front wheel of 3-wheelers by sliding over the inspection pit.
- Locking mechanism should be provided for loading & unloading of front wheel of 3-wheelers on the trolley.

2.2.5 Calibration EquipmentSet

Calibration Equipment Set shall be available at the ATS. Two-point calibration system shall be provided, as applicable. All the lanes may use the same calibrating devices. All the measuring equipment shall be calibrated. Bidder shall be responsible for calibration of all measuring equipment.
Bidder to suggest, justify and provide calibration equipment's and procedures for following:

- Emission measurement system for diesel/gasoline vehicles
- Roller brake tester
- Speedometer tester / Speed Governor Tester
- Semi-Automatic Headlight tester
- Suspension tester
- Side slip tester
- Axle weight measurement

- Electronic Steering gear play measurement
- Sound level meterr

In any case, the bidder may suggest and justify any field calibration procedure for the above equipment. Since all calibration of the equipment will have to be done at the first instance during commissioning, above items would be required. For calibration of Axle weight measurement system, either calibration tool need to be supplied or renting locally from local laboratories accredited by NABL is also accepted. Subsequently, if any of the calibrating equipment's are consumables in nature will have to be replenished by the bidder as a part of the operation through the entire contract period.

2.2.6 Automatic Tyre Pressure Filler and Indicator:

- Technical specifications should be:
  - Resolution: +/- 0.1bar
  - Accuracy: ± 0.5 % of Full Scale or better
  - Full scale: at least 10.6bar

2.3 Inspection Lane LCV

2.3.0 Visual Inspection:

All visual inspections shall be carried out as specified in the Table-D of Chapter XI of Central Motor Vehicle Rule for Recognition, Regulation and Control of Automated Testing Station. All Visual checks conducted on a vehicle in the ATS shall be photographed using a mobile device and the record of the same shall be preserved for at least six months for audit and assessment purposes.

2.3.1 Roller Brake Tester:

Device devoted to the measurement of braking force in the wheels of a specific axle taking into account the brake power applied on the brake pedal. Service, emergency and parking brakes shall be tested.

This equipment shall be used to test Light Commercial Vehicles including Three-wheeled vehicles, Quadricycles and Passenger Carsupto 3.5 tons GVW.

- Technical Specifications:
  - Maximum measurable brake load is at least of 6kN
  - Difference in left & right braking efficiency
  - Brake load resolution <=100N
  - Suitable roller diameter, length and separation as per the Matrix given in Annexure-V: Characteristics of Vehicles to be Tested
  - Provision for either lifting or braking of roller for easy exit of vehicle
  - Approximate Testingspeed:5km/h ± 1 km/h
  - Roller surface:

- Minimumfrictionalcoefficient-0.6(Supporting documents from Internationally certified agencies or NABL accredited labs in India for confirmation of minimum frictional coefficient of roller surface need to beprovided)
- Service life – minimum 25000hrs (Self-declaration from OEM specifying required useful life of rollers without any damage need to be provided)

- Measurement accuracy: within ± 100N.

2.3.2 Axle Weight Measurement:

Weighing scale for measurement of each axle weight is required. The system should determine this by adding together the axle weight, tare weight/Kerb weight of the vehicle.

Axle weight measurement system can be separate or integrated within either Suspension Tester or Roller Brake Tester equipment.

- Technical specifications:
  - Measuring range: 0 – 3000 kg
  - Resolution: 5kg
  - Accuracy: ± 1% of reading

2.3.3 Suspension Tester:

Equipment devoted to check the behavior of the suspension system in each one of the vehicle's axles (dampers, helper springs, tyres and auxiliary equipment) determining the damping of the oscillations amplitude exteriorly.

This equipment shall be used to test Quadricycles, Passenger Cars including other Light Commercial Vehicles upto 3.5 tons GVW.

- Technical specifications:
  - Amplitude of excitation: 6.5 mm +/- 5mm
  - Measurement accuracy: ± 1% of wheel load

2.3.4 Side Slip Tester:

Equipment devoted to the measurements of alignment of the wheels on same axle. This equipment shall be used to test Quadricycles, Passenger Cars and Light Commercial vehicles upto 3.5 tons GVW.

- Technical specifications:
  - Suitable dimension of track plate: length, width and height
  - Measuring range: ± 20m/km
  - Measuring resolution: 1m/km
  - Accuracy: ±1.0m/km

2.3.5 Joint Play Tester:

Equipment devoted to the inspection of the play between different elements of the wheels, bars and tie rods, shock absorber systems, brakes and linkages between two specific components and the chassis of the vehicle.

This equipment shall be used to test Quadricycles, Passenger Cars and Light Commercial vehicles upto 3.5 tons GVW.

- Technical specifications:
  - Maximum Force per plate is at least of 6kN
  - Maximummovementoneachside:50 - 80 mm (Hydraulic)

2.3.6 Electronic Steering Gear Play Detector:

Equipment devoted to check the free play in steering gear as per Central Motor Vehicle Rule 98.

- Technical specifications:
  - Capable of measuring angular movement up to ± 30°
  - Recording mechanism to measure wheel movement against steering movement
  - Measurement accuracy: ± 2% of full-scale deflection

2.3.7 Semi-Automatic Headlight Tester:

Equipment devoted to check the horizontal and vertical light flux orientation, low beam pattern of the Head Lamp. This device shall be capable of measuring the Head Lamp's light intensity and inclination. Measurement of low beam pattern, Head Lamp's light intensity and test data transfer from Semi-Automatic Head light tester shall be done automatically.

This equipment shall be used to test Light Commercial Vehicles including Quadricycles, Passenger Cars, upto 3.5 tons GVW.

- Technical specifications:
  - Light Intensity range measure (min): 0-100,000cd
  - Illumination Intensity range measure: 0-200lux
  - Headlight tester must have ability to autofocus and should be capable of measuring headlamp with their Centers 500 mm to 1200 mm above ground level.
  - Vertical and horizontal measuring range: ±50 cm/10 m (±5%)
  - Intensity maximum deviation: ±5% of reading
  - Maximum deviation of inclination measurement (vertical orientation): ± 0.1%
  - Headlamp tester to be placed on a perfectly level surface/ rails.

2.3.8 Smoke Meter (Opacimeter):

Equipment devoted to the measurement of exhaust gas opacity in diesel engines. This equipment shall be used to test diesel fueled vehicles as per CMVR/TAP 115/116 or AIS-137 (Part 8).

- Technical specifications:
  - Equipment to meet specifications as per MoRTH / Central Motor Vehicles Rules, 1989 / TAP 115 / 116 or AIS 137 (part 8).

2.3.9 Exhaust Gas Analyzer:

This equipment shall be used for measurements of exhaust emissions of gasoline, CNG and LPG vehicles as per CMVR/TAP 115/116 or AIS-137 (Part 8).

- Technical Specifications:
  - Equipment to meet specifications as per MoRTH / Central Motor Vehicles Rules, 1989 / TAP 115 / 116 or AIS 137 (part 8).

2.3.10 Speedometer Tester / Speed Governor Tester:

Equipment used to measure the functioning of the speedometer & Speed Governor (if fitted) of the vehicle.

It shall be able to test Quadricycles, Passenger Cars, 3 wheeled vehicles and vehicles upto 3.5 tons GVW.

- Technical Specifications:
  - Suitable dimension of track width, roller diameter and axle separation, as per the Matrix given in Annexure-V: Characteristics of Vehicles to be Tested
  - Provision for lifting and braking of roller for easy exit of vehicle
  - Measuring range: 20 – 160km/h
  - Resolution: 1km/h
  - Accuracy: ± 1 % of indicated reading

2.3.11 Sound Level Meter:

- Technical Specifications:
  - Recommended as per IEC 60651/ IEC61672-1
  - Measuring range: ≥30dB to≤120dB
  - Frequency: A &C
  - Accuracy: ± 1.5dB
  - Tripod stand mounted
  - Build battery for power source of charging from outlet of 220V AC and USB
  - Resolution: 0.1 dB
- The location of the Sound Level Meter to be clearly marked on the test station.

2.3.12 OBD Scan Tool:

- Technical Specifications
  - Compliant to: OBDII/EOBD/HD-OBD/WWH-OBD Scan-Tool in accordance with SAE J1979, SAE J1939 and ISO 27145
  - Must support all OBD modes
  - Diagnostics Communication Mediums Supported: KWP2000 (K-Line, CAN TP 2.0 and ISO-CAN), UDS (ISO-CAN)

2.3.13 Test Fingers:

- Technical Specifications:
  - IP XXB & IP XXD test fingers

2.3.14 Insulation Tester:

- Technical Specifications:

Rated measuring voltage: upto 1000V DC/AC (45 to 65 Hz)
Measuring range: 10kΩ to 100MΩ or better
Accuracy: upto 10MΩ ±2% of reading & above 10MΩ ±5% of reading

2.4 Inspection Lane HCV

2.4.0 Visual Inspection:

All visual inspection shall be carried out as specified in the Table-D of Chapter XI of Central Motor Vehicle Rule for Recognition, Regulation and Control of Automated Testing Station. All Visual checks conducted on a vehicle in the ATS shall be photographed using a mobile device and the record of the same shall be preserved for at least six months for audit and assessment purposes.

2.4.1 Roller Brake Tester:

- Technical Specifications:
  - Maximum measurable brake load: at least 40kN.
  - Difference in left & right braking efficiency
  - Suitable roller diameter, length and separation as per the Matrix given in Annexure-V: Characteristics of Vehicles to be Tested
  - Provision for lifting and braking of roller for easy exit of vehicle
  - Roller surface:
    - Minimum frictional coefficient: 0.6 (Supporting documents from Internationally certified agencies or NABL accredited labs in India for confirmation of minimum frictional coefficient of roller surface need to be provided)
    - Service life: minimum 25000 hrs (Self-declaration from OEM specifying required useful life of rollers without any damage need to be provided)
  - Brake load resolution: ≤100N

- Approximate Testing speed: minimum 2.5km/h
- Measurement accuracy: within ± 2% of the measured value

2.4.2 Axle Weight Measurement:

Weighing scale for measurement of each axle weight is required. The system should determine this by adding together axle weight, tare weight/ Kerb weight of the vehicle.

Axle weight measurement system can be separate or integrated within Roller Brake Tester equipment.

o Technical specifications:
- Measuring range: 0 kg – 15000 kg
- Resolution: 5kg
- Accuracy: ± 1% of reading

2.4.3 Side Slip Tester:

Equipment devoted to the measurements of alignment of the wheels of a same axle.

o Technical Specifications:
- Suitable dimension of track plate: length, width and height
- Measuring range: ± 20m/km
- Measuring resolution: 1m/km
- Accuracy shall be ±1.0m/km

2.4.4 Joint Play Tester:

Equipment devoted to the inspection of the play between different elements of the wheels, bars and tie rods, shock absorber systems, brakes, and linkages between two specific components and the chassis of the vehicle.

o Technical Specifications:
- Maximum Force per plate is at least of 30kN
- Maximum movement on each side: 100mm (Hydraulic)

2.4.5 Electronic Steering Gear Play Detector:

EquipmentdevotedtocheckthefreeplayinsteeringgearasperCentralMotorVehicle Rule98.

o Technical specifications:
- Capable of measuring angular movement up to ± 30°
- Recording mechanism to measure wheel movement against steering movement
- Measurement accuracy: ± 2% of full-scale deflection

2.4.6 Semi-Automatic Headlight Tester:

Equipment devoted to check the horizontal and vertical light flux orientation, low beam pattern of the Head Lamp. This device shall be capable of measuring the Head Lamp's light intensity and inclination. Preferable checking could be based on spotting the headlamp reference point. Measurement of low beam pattern, Head lamps light intensity and test data transfer from Semi-Automatic Head light tester shall be done automatically.

- Technical specifications:
  - Light Intensity range measure (min): 0-100,000cd
  - Illumination Intensity range measure: 0-200lux
  - HeadlighttestermustbecapableofmeasuringheadlampwiththeirCenters500 mm to 1200 mm above ground level.
  - Vertical and horizontal measuring range: ±50 cm/10 m (±5%)
  - Maximum deviation of intensity: ±5% of reading
  - Maximum deviation of Inclination measurement (vertical orientation): ± 0.1%
  - Headlamp tester to be placed on a perfectly level surface/ rails.

2.4.7 Smoke Meter (Opacimeter):

Equipment is devoted to the measurement of exhaust gas opacity in diesel engines. This equipment shall be used to test diesel fueled vehicles as per CMVR/TAP115/116 or AIS-137 (Part 8).

- Technical specifications:
  - Equipment to meet specifications as per MoRTH / Central Motor Vehicles Rules, 1989 / TAP 115 / 116 or AIS 137 (part 8).

2.4.8 Exhaust Gas Analyzer:

This equipment shall be used for measurements of exhaust emissions of gasoline, CNG and LPG vehicles as per CMVR/TAP 115/116 or AIS-137 (Part 8).

- Technical Specifications:
  - Equipment to meet specifications as per MoRTH / Central Motor Vehicles Rules, 1989 / TAP 115 / 116 or AIS 137 (part 8).

2.4.9 Speedometer Tester / Speed Governor Tester:

Device measure the functioning of the speedometer of the vehicle. It measures speed and distance covered by a vehicle.

- Technical specifications:
  - Suitable dimension of track width, roller diameter and axle separation, as per the Matrix given in Annexure-V: Characteristics of Vehicles to be Tested
  - Provision for lifting and braking of roller for easy exit of vehicle
  - Measuring range: 25 – 100km/h
  - Resolution: 1km/h
  - Accuracy: ± 1 % of indicated reading

2.4.10 Sound Level Meter:

- Technical Specifications:
  - Recommended as per IEC 60651/ IEC61672-1
  - Measuring level: ≥30dB to≤120dB
  - Frequency: A &C
  - Accuracy: ± 1.5dB
  - Tripod stand mounted
  - Build battery for power source of charging from outlet of 220V AC & USB
  - Resolution: 0.1 dB
- The location of the Sound Level Meter to be clearly marked on the test station.

2.4.11 OBD ScanTool:

- Technical Specifications:
  - Compliant to: OBDII/EOBD/HD-OBD/WWH-OBD Scan-Tool in accordance with SAE J1979, SAE J1939 and ISO 27145
  - Must support the all OBD modes
  - Diagnostics Communication Mediums Supported: KWP2000 (K-Line, CAN TP2.0 and ISO-CAN), UDS (ISO-CAN)

2.4.12 Test Fingers:

- Technical specifications:
  - IP XXB & IP XXD test fingers

2.4.13 Insulation Tester:

- Technical specifications:
  - Rated measuring voltage: upto 1000V DC/AC (45 to 65Hz)
  - Measuring range: 10kΩ to 100MΩ or better
  - Accuracy: upto 10MΩ ±2%ofreading & above 10MΩ ±5% of reading

2.5 Software considerations

In order to guarantee the certainty of the obtained values and to save the information, it is required that all the equipment which measures a value is connected to the central unit. A device is considered automatically connected when the result of the test is automatically obtained, transmitted to the central unit and evaluated.

The database must be stored in SQL data management software platform to enable easy exchange and analysis of data with other platforms. The bidder should develop suitable software from time to time as required by BMTC with an overall objective of meeting the test requirements, the operation of the ATS and meeting all the requirement of regulating authorities.

Each input, whether automatic or manual shall be identified with the inspector's

reference and stored together with all the results of the tests performed on the vehicle which shall be transmitted automatically to the central unit. The inspection pass fail criteria of a test must be automatic and not editable by the inspector.

The following equipment shall be connected automatically to the central unit:

- Roller Brake Tester
- Suspension Tester
- Side Slip Tester
- Smoke Meter (Opacimeter)
- Exhaust Gas Analyzer
- Speedometer Tester / Speed Governor Tester
- Semi-Automatic Headlight Tester
- Sound Level Meter
- Electronic Steering Gear Play Detector
- OBD Scan Tool

The software shall be able to receive the results from the following inspections that will be introduced manually in any computer in the lane or the central computer.

- Visual inspection
- Any inspection from the described above not connected automatically.

The software shall verify the status of all the equipment and sub-systems specified.

The software shall allow templates for easier preparation of the inspection. It shall also prepare the test file in XLS export file type or similar reports. The software shall allow to view and to obtain a printout of the results of each test separately. Measured value of each test to be provided in the report. The printout and the software operation shall be developed as required by BMTC from time to time. For each test the information shall be recorded and it shall be available from all the computers in the ATS along with the access control.

The bidder shall provide one computer per station to be installed in the inspection zone. The bidder shall provide a central unit and the network that links all the computers in the ATS.

2.6 SafetySystems

2.6.1 Personal safety systems

All the equipment supplied shall be equipped with all the safety protections required for the normal usage of the equipment and for the security of the people who work in each machine. All the essential safety devices such as safety protection

in respect of single phase failure, phase sequence change, surge protection, under & over voltage protection etc., has to be provided by the bidder at each console unit. Safety devices can be installed after LT panel, so that, phase change or single phasing should only affect working of 3-phase equipment & not all the equipment. Other safety items must be provided by bidder to safeguard their equipment against surge voltage including frequency corrector, Hi/Lo voltage corrector etc.

2.6.2 Power cut-off protection device

The safety procedure should take into account the fact of the power cut-off. In the case of occurring during a test measurement, the system shall be able to resume the test once electrical supply is back without any data loss.

Annexure IV A: IT Equipment Specification

The parameters given in Technical specifications are minimum required & guidelines for selecting a product with better specifications for desired functionality.

Server Specifications:

- Processor Type: Intel Xenon Scalable Processor V2 or better
- Processor: Minimum of 12 cores/Processor or better
- Power supply: 650W Redundant power supply
- Internal Storage: Enterprise SSD 7 TB or better
- Hot swap or better

Desktop Specifications:

- ***Desktop PC:***
  - Intel® 10th Generation Core™ i7 Processors or better
  - 3.0 GHz base frequency, or better
  - 1 TB SSD / NVMe drive
  - 8 GB 1333 MHz DDR3 SDRAM or better

- ***LED monitor:***
  - 20" Wide TFT monitor
  - Resolution: 1600 x 900 with DP & VGA ports
  - TCO certified
  - Monitor stand should be Height adjustable, Landscape/Portrait pivot, left/right swivel, Forward/backward tilt.

Printer Specifications:

- ***Report / Certificate Printer:***
  - Laser and duplex printer (Black and Colour)
  - PPM- 30 or better
  - Page size supported: A4, B5, A5, Legal, Letter, Statement, Executive, Government Letter, Government Legal, Foolscap, Indian Legal Custom (Minimum 76.2 x 210 mm to Maximum 216 x 356 mm)
  - Print resolution: 600 x 600 dpi or better

- ***Sticker Printer:***
  - Printing Resolution: 1200 x 1200 dpi or better
  - Color inkjet printing
  - Print speed: 50 mm/s or better
  - Media: Label roll media
  - Sticker length: 80±2 mm to 100±2 mm
  - Sticker width: 60±2 mm to 45±2 mm
  - Interface: Hi-speed USB 2.0 port, 10/100 Ethernet networking, RS 232

Number Plate Reader Camera Specifications:

- Frames per second: 50
- Megapixel: 2.0 or higher
- On VIF Protocol
- IP67

Global Positioning System Enabled Camera Specifications:

- Resolution: Minimum 20 megapixels
- Optical Zoom: 3x
- Special Features: Built-in Wi-Fi and GPS support (High sensitivity, high precision built-in GPS in Camera should allow users to tag images with GPS coordinates, recall shooting locations and even route travelled with its logging function)

Speed Dome Camera Specifications:

- Image sensor 1/3'' Progressive Scan CMOS
- 20X optical or better / digital zoom camera
- 30x motorized zoom lens and auto focus
- Megapixel: 2.0 or higher
- IP67
- IK10

CCTV Specifications:

4MP IR Bullet Camera:

- **Camera:**
  - Image Sensor: 1/3" Progressive Scan CMOS
  - Min. Illumination: Color: 0.01 Lux @ (F1.2, AGC ON), 0.018 Lux @ (F1.6, AGC ON), 0 Lux with IR
  - Shutter Speed: 1/3 s to 1/100,000 s
  - Wide Dynamic Range: 120dB
  - Day & Night: IR Cut Filter
  - Angle Adjustment: Pan: 0° to 355°, tilt: 0° to 75°, rotate: 0° to 355°
- ***Lens***
  - Focus: Fixed
  - Lens Type: 2.8/4/6/8 mm
  - FOV: 2.8 mm, horizontal FOV: 103°, vertical FOV: 58°, diagonal FOV: 123°,4 mm, horizontal FOV: 83°, vertical FOV: 45°, diagonal FOV: 99°,6 mm, horizontal FOV: 51°, vertical FOV: 29°, diagonal FOV: 58°,8 mm, horizontal FOV: 39°, vertical FOV: 22°, diagonal FOV: 45°
  - Aperture: F1.6
  - Lens Mount: M12

- Aperture Type: Fixed

- ***Illuminator***
  - IR Range: Up to 30 m
  - Wavelength: 850nm

- ***Video***
  - Max. Resolution: 2688 × 1520
  - Main Stream:
    50Hz: 25fps (2688 × 1520, 2560 × 1440, 2304 × 1296, 1920 × 1080, 1280 × 720)
    60Hz: 30fps (2688 × 1520, 2560 × 1440, 2304 × 1296, 1920 × 1080, 1280 × 720)
  - Sub Stream: 50Hz: 25fps (640 × 480, 640 × 360, 320 × 240),60Hz: 30fps (640 × 480, 640 × 360, 320 × 240)
  - Third Stream: 50Hz: 25fps (1280 × 720, 640 × 360, 352 × 288),60Hz: 30fps (1280 × 720, 640 × 360, 352 × 240)
  - Video Compression: Main stream: H.265/H.264, Sub-stream: H.265/H.264/MJPEG, Third stream: H.265/H.264
  - Video Bit Rate: 32 Kbps to 16 Mbps
  - Scalable Video Coding (SVC): H.264 and H.265 encoding

- ***Audio***
  - Audio Sampling Rate: 8kHz/16 kHz/32 kHz/44.1 kHz/48 kHz
  - Audio Compression: G.711/G.722.1/G.726/MP2L2/PCM
  - Audio Bit Rate: 64Kbps(G.711)/16Kbps(G.722.1)/16Kbps(G.726)/32-192Kbps(MP2L2)

- ***Network***
  - Simultaneous Live View: Up to 6 channels
  - API: ONVIF (PROFILE S, PROFILE G, PROFILE T), ISAPI, SDK, Ehome
  - Protocols: TCP/IP, UDP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour, SSL/TLS
  - User/Host: Up to 32 users
  - Security: Password protection, complicated password, HTTPS encryption, 802.1X authentication (EAP-TLS 1.2, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest authentication for HTTP/HTTPS, WSSE and digest authentication for ONVIF, TLS1.2
  - Network Storage: Support Micro SD/SDHC/SDXC card (128G), local storage and NAS (NFS, SMB/CIFS), ANR
  - Web Browser: Plug-in required live view: IE8+ Plug-in free live view: Chrome 57.0+, Firefox 52.0+, Safari 11+ Local Service: Chrome 41.0+, Firefox 30.0+
  - Alarm Trigger: Motion detection, video tampering, network disconnected, IP address conflict, illegal login, HDD full, HDD error

- ***Image***
  - Day/Night Switch: Day/Night/Auto/Schedule/Triggered by Alarm In (-S)
  - DNR: 3D DNR
  - Image Enhancement: BLC/3D DNR/HLC
  - Image Settings: Rotate mode, saturation, brightness, contrast, sharpness,

AGC, and white balance

- ***Interface***
  - Audio: 1 input (line in/mic in), 1 output (line out), terminal block, mono sound
  - Alarm: 1 input, 1 output (max. 12 VDC, 30 mA), terminal block
  - Video Output: No
  - On-board Storage: Built-in Micro SD/SDHC/SDXC slot, up to 128 GB
  - Hardware Reset: Yes
  - Communication Interface: 1 RJ45 10M/100M self-adaptive Ethernet port
- ***General***
  - Operating Conditions: 10°C to 60°C, Humidity 95% or less (non- condensing)
  - Power Supply: 12 VDC ± 25%, Φ 5.5 mm coaxial power plug, PoE (802.3af, class 3)
  - Protection: IK10, IP67
  - Certifications: UL, CE, FCC

Network Video Recorder (NVR) Specifications:

- Multiplex recording schedule options: manual, alarm, motion detection, timing
- Multiplex operation: live view, record, play back, backup and remotely control the system simultaneously
- HDMI and VGA output simultaneously at up to 1080P resolution
- H.265 High profile decoding,2 SATA HDD interface: maximum 8TB storage capacity or more.

Smart TV with CCTV viewer Specifications:

- 40" LED Full FHD monitors / TV
- minimum brightness - 350 nits
- Contrast ratio – 5000:1
- Input ports - VGA, HDMI
- External Control - RS 232 / RJ 45, RoHS compliance
- Suitable for 24 x 7 operation

LED Displays:

- Display shall guide the operator for carrying out the tests.
- Display size. 32 inches

❖ Video footage of vehicles being inspected and certified in the ATS shall be stored for a period of minimum six months.

Annexure-V: Characteristics of Vehicles to be Tested

Basic vehicle fleet characteristics have been determined and summarized here. Publicly available data has been used to estimate the minimum and maximum dimensions of vehicles to be inspected in the test lanes. Please refer table below.

The commercial vehicles which are required to be subjected for inspection in the vehicle inspection at the proposed test lanes at the ATS shall comprise mainly of Diesel/Gasoline/CNG/LPG fueled & Electric powered – Trucks, Buses, and Taxis. In case of trailers, only prime mover unit shall be tested. The bidders are requested to take note of this and provide suitable equipment's to the lanes for testing these kinds of vehicles.

The general classifications of these vehicles, for purposes of this summary, can be broadly defined as such:

3w, Quadricycles, Passenger cars / Taxis – vehicles used for general transportation of occupants and having a GVW of less than 3500Kg. This general category can include light passenger trucks not intended for commercial use.

Trucks/ Buses – Heavy Commercial Vehicle lane shall be capable to conduct the test on heavy commercial vehicle having 2/3/4 axles and more than GVW 3500 Kg..

Details	3-Wheeler		Quadricycles		4W (M1, N1)		4W LCV (M2, N2)		HCV (M3, N3)			
									Trucks (N3)		Bus (M3)	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Front Axle wt. (kg)	90	260	215	215	420	1285	1045	4150	1235	8951	360	6160
Rear Axle wt. kg	205	780	308	308	315	1395	810	7840	810	10224	1360	8900
Kerb wt. kg	203	800	474	474	730	2625	1210	5440	2045	19175	2660	15000
GVW kg	610	2150	823	823	935	3490	1960	11990	12990	47500	5000	22000
Wheelbase mm	1590	3070	1925	1925	2050	3264	2100	4500	2500	6750	2654	8350
Wheel Track mm Front	-	-	1143	1143	1300	1690	1310	2022	1410	2124	1630	2054
Wheel Track mm Rear	1150	1540	1143	1143	1315	1705	1343	1814	1406	1926	1486	1880
Length mm	2080	2510	2752	2752	1402	5226	3790	7965	4634	11994	5125	15000
Width mm	1100	1520	1312	1312	1495	2173	1500	2470	1870	2590	1910	2600
Height mm	1635	2070	1652	1652	1297	2750	1890	3410	2530	3940	2200	3730
Overhang Front mm	-	-	387	387	464	1297	760	2280	1050	1695	1000	2500
Overhang Rear mm	443	790	440	440	405	1375	710	2385	805	3484	1250	3560
Ground clearance mm	150	255	158	158	89	220	150	375	176	300	150	259
TCD m	-	-	6.96	6.96	8.33	12.6	8.5	19.7	12.3	23.99	11.17	23.4
TCCD m	-	-	7.32	7.32	7.95	13.5	9.8	21.2	14	25.5	12.84	27.2

Characteristic of vehicles to be tested

Annexure-VI: Evaluation Parameters

1.0 EligibilityCriteria

1.1 **EarnestMoneyDeposit-** All bids should be accompanied by requisite Earnest Money Deposit. EMD shall be submitted through the payment gateway at E – Tender portal (**kppp.karnataka.gov.in**).

1.0 **Evaluation Criteria (Technical) -** The evaluation of the bids shall be done by a Committee constituted for the purpose. The evaluation shall be strictly based on the information and supporting documents provided by the applicants in the bid. It is the responsibility of the bidder to provide all supporting documents necessary to fulfill the mandatory eligibility criteria. In case, the required information is not provided by bidder, the Committee shall proceed with evaluation based on information provided and may not request the bidder for further information. Hence, responsibility for providing information as required in this form lies solely with bidder.

It is expressly made clear that mere submission of bid, eligible or not eligible, shall not confer any right whatsoever on any such bidder. Any bid submitted by the bidder, which fails to satisfy the eligibility requirements, shall not be considered and would stand summarily rejected. BMTC will have the right to reject any or all bids, received in response to this tender and its decision in this regard shall be final and binding.

Bidder is required to furnish the technical details as specified in **Annexure IV.** Any deviation to this effect needs to be addressed in **Form f).**

1.1 Financial bids of only those bidders meeting above eligibility requirements shall be considered for commercial evaluation.

2.0 Examination of Financial Proposal and Correction of Arithmetical Errors

Financial bid of successful bidder will be evaluated as below:

Bidder must ensure that financial bid explicitly gives following information:

1. Cost of Design, construction & civil work of equipment foundations including allied services like test shed trimix flooring, epoxy coating for the flooring, conduiting for cables including 3-phase & Single phase cables, drainage, compressor piping & fresh air ducting for underbody inspection pits.
2. Basic Cost of Test Lane Equipment listed as per **Table 1, Clause 2: List of Test Lane Equipment**, mentioned in **Annexure –I: Scope of Work** including 2 years' warranty.

3. Cost of exhaust gas handling system.
4. Basic cost of Lane operation & management software for one user license.
5. Installation and commissioning of all the equipment and software.
6. ATS operation cost for 5 years inclusive of all running expenses which includes manpower, housekeeping, security, fixed cost as mentioned in running bill & consumption cost for water, electricity, telephone, internet and applicable taxes.
7. Cost of documentation. (Two sets of operation & maintenance manuals in English, Hindi & Kannada).
8. Pre-dispatch inspection test and training prior to dispatch of equipment for a team of 4 - 5 persons, for a period of one week.
9. On-site training charges for equipment operation & maintenance.
10. Applicable custom duty and taxes.
11. Packing and forwarding charges.
12. Freight, insurance and transport charges up to the destination.
13. Cost of comprehensive AMC for Test lane equipment for third, fourth & fifth years after initial two years' warranty.
14. Cost of consumables for 5 years e.g. sampling probes, filters, oil, grease, calibration gases, bearings, bushes etc. (Consumables does not include spares. Spares are to be considered as part of warranty).

Bid to be quoted in Indian National Rupees only.

BMTC will review the detailed contents of each financial bid to ensure that they are complete, whether the bidder has quoted all items of financial bid form and correct any arithmetical error.

BMTC shall correct arithmetical errors on the following basis:

(a) If there is a discrepancy between the sub component price/s and the total price that is obtained by multiplying the unit price and quantity/adding the sub component price/s, the sub component price/s shall prevail and the total price shall be corrected, unless in the opinion of the Employer that there is an obvious misplacement of the decimal point in the sub component price, in which case the total price as quoted shall govern and the sub component price/s shall be corrected.

(b) if there is an error in a total, corresponding to the addition or subtraction of sub- totals, the subtotals shall prevail and the total shall be corrected; and

(c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above. The amount stated in the Letter to Bid will be adjusted by the Employer in accordance with the above procedure for the correction of errors and, shall be considered as binding upon the bidder. If the bidder does not accept the corrected amount of bid, its bid will be rejected, and the bid security may be forfeited.

Criteria for deciding successful bidder (Lowest):

(a) While deciding the lowest bidder, the total composite cost of acquisition and running the same for five years will be compared.

(b) The sum total will comprise of costs quoted against **Sr. no. 1 to 14** under **Clause 2.0** above.

After selection, work order shall be issued, in duplicate, by the Authority to the selected bidder and the selected bidder shall, within 7 (seven) days of receipt of LOA, sign and return the duplicate copy of the work order in acknowledgement thereof. At the same time, the selected bidder shall also pay a Performance Bank Guarantee of **Rs. 30,00,000/- (Rupees Thirty Lakhs Only)** in the form of Demand Draft (DD) or an irrevocable Bank Guarantee in favour of "Chief Accounts Officer- FA, BMTC" issued by nationalized or scheduled banks, having head office in India, payable at Bengaluru only at the time of signing of contract.

Annexure-VII: Acceptance Criteria

Acceptance shall be done in two steps.

1. Pre-dispatch inspection at the supplier site for individual elements before shipment
2. Acceptance of the supplied elements on-site

1. Pre-dispatch inspection

Once it has been proved through the proper documents including technical specifications and Calibration certificates that all the equipment appearing in the quotation fulfils all the technical requirements, the equipment can be supplied by the bidder & the same shall be inspected at the Bidder's site by the authorized personnel from BMTC during pre-dispatch inspection of actual equipment to be supplied.

- Pre-dispatch inspection of Roller Brake Tester
- Pre-dispatch inspection of Suspension Tester
- Pre-dispatch inspection of Side Slip Tester
- Pre-dispatch inspection of Speedometer Tester / Speed Governor Tester
- Pre-dispatch inspection of Joint Play Tester
- Pre-dispatch inspection of Semi-Automatic Headlight Tester
- Pre-dispatch inspection of Electronic Steering Gear Play Detector
- Pre-dispatch inspection of Smoke Meter (Opacimeter)
- Pre-dispatch inspection of Exhaust Gas Analyzer
- Pre-dispatch inspection of Sound Level Meter
- Pre-dispatch inspection of OBD Scan Tool

The Pre-dispatch inspection visit will imply:

- Visual inspection of the actual equipment.
- Inspection of the testing equipment when running a real vehicle.
- Inspection of the calibration procedure.
- Verification of the equipment to certify that it fulfils the real needs of the Automated Vehicle Fitness Test Station.

All calibration certificates should be available to BMTC by the time of pre-dispatch inspection.

For Exhaust Gas Analyzers and Smoke meter (Opacimeter), the Bidder at its own cost, shall be required to provide Type Approval certification as per CMVR/TAP 115/116 or AIS-137 (Part-8) by the time of final on-site acceptance.
Remaining equipment shall be calibrated as per International Standards by an accredited certification agency. In case this is not available for some equipment, the Bidder is required to thoroughly explain the calibration procedure used, and to submit all required traceability information.
All the previous information is also required for the calibrating equipment itself.

The supplier should also deliver the procedure that will be used to qualify the equipment during the commissioning..

2. Commissioning

- Calibration certificate will be checked with the serial numbers of the equipment delivered onsite.
- A full re-calibration will be done on site.
- Validation of the sensors
- Validation of the software
- Connections and validation of power supply
- Validation of system
- Validation of calibration plan during warranty
- Verification of the provided documentation

3. Final acceptance

After complete commissioning, the following tests will be performed:

- Values obtained in the calibrations will be checked to be admissible.
- The correct running of the software and data dump will also be checked.
- Inspections will be undertaken with different type of vehicles to prove that operation and results of the equipment fulfils the requirements demanded in this tender document.

These tests might be used to validate the complete system. Bidder shall ensure that there are proper vehicles and drivers required to perform the tests.

Annexure-VIII: Terms of Payment

The stage wise Payments shall be made in Percentage of the Total Agreed Cost of works as agreed by the bidder. The Payment will be made after completion of particular stage in all respect as per the detail in **"Annexure-I: Scope of Work"** in compliance of all the conditions mentioned in the Tender Document.

It is mandatory that bidder shall submit stage wise bills along with the Test Reports of the materials (from Govt. Approved Laboratory) used in the works and the photographs of the complete stage of construction as well as periodically photographs taken during execution. The photographs shall be taken from the Digital camera showing the date and time on the photograph, nothing extra shall be payable to the bidder on this account. The frequency of Test of materials will be as per the standard norms.

The main scope of work for each component shall be governed as detailed in "**Annexure-I: Scope of Work**" of the tender document and final payment shall be made accordingly to the bidder.

1. Payment for Equipment foundation work at ATS:

Sr. No.	Description	Rate (%)
1.	Completion of Design, construction & civil work of equipment foundations including allied services like test shed trimix flooring, conduiting for cables including 3-phase & Single phase cables, drainage, compressor piping and fresh air ducting for all underbody inspection pits	80%
2.	After epoxy coating for the flooring	20%

2. Payment for Supply, Installation and Commissioning of Test Lane Equipment at ATS:

Letter of Credit (LC) will be opened after receipt of acceptance of work order &furnishing the Performance Bank Guarantee of requisite amount.

Sr. No.	Description	Rate (%)
1.	Receipt of Test Lane Equipment& IT Equipment in good condition and correct quantity at site	60%
2.	Installation of Test Lane Equipment & IT Equipment in all respects including electrical installation work	10%
3.	Supply and Installation of Lane Operation & Management software	10%
4.	Commissioning of the whole system	20%

3. Payment for Supply, Installation and Commissioning of Exhaust Gas Handling System at ATS:

Sr. No.	Description	Rate (%)
1.	Receipt of Exhaust Gas Handling System in good condition and correct quantity at site	60%
2.	Installation of Exhaust Gas Handling System	20%
3.	Commissioning of Exhaust Gas Handling System	20%

4(a) Payment of AMC:

Payment of AMC shall be made on quarterly basis on submission of bills/invoices by the bidder.

4 (b) Invoice submission procedure (applicable for AMC payments)

- The Successful Bidder shall submit the invoice on quarterly basis to the BMTC i.e. tendering authority along with all supporting documents such as
  - Tax Invoice
  - Relevant compliance documents
  - Any other documents sought by BMTC from time to time as per BMTC prevailing practice.

  and collate and submit the approved invoice along with necessary attachments to the office of the BMTC for further processing.
- The BMTC shall verify the invoice of the Successful Bidder The corresponding payment shall be calculated subject to liquidated damages, Warranty / AMC terms and other conditions of the Tender document.
- The BMTC shall not pay anything over and above the quoted and agreed payment as per terms defined in the tender document.
- The BMTC shall not pay anything extra for the software applications, its maintenance etc.
- In case of any disputes, part payment may be released, and the withheld payment may be released as per decision taken on the corresponding dispute.
- All the deduction will be calculated based on the tender conditions and will be deducted from the invoice amount and the remaining amount will be paid to the Bidder.
- BMTC shall reserve right to withheld / deduct any deductions applicable as per prevailing guidelines.

4. Taxes & Duties:

The Taxes and Duties shall be applicable as per the provisions of Clause 27 of "**Annexure IX** - General Conditions of Contract".

5. Deviations in Terms of Payment:

The Bidder's offer must be as per the Terms of Payment given above. Any deviation from the above Terms of Payment shall not be entertained. Any offer with deviation from the above Terms of Payment shall be liable to disqualification.

Annexure-IX: General Conditions of Contract

1. DEFINITIONS AND INTERPRETATIONS

1.1 *Definitions*

In these General Conditions of Contract ("Conditions") the following words and expressions shall, unless repugnant to the context or meaning thereof, have the meaning hereinafter respectively ascribed to them:

"Acceptance Tests" means the tests described as such in the Testing Plans.

"Affected Party" means a Party whose performance of its obligations under the Contract is prevented, hindered or delayed in whole or in part by reason of Force Majeure.

"Applicable Clearances" means any clearance, permit, authorization, consent, license (including without limitation, any import or export licenses), lease, ruling, exemption, filing, agreements, or approval, required to be obtained and maintained by the Bidder from time to time, in order to complete the Works.

"Applicable Laws" means all laws in force and effect as of the date hereof and which may be promulgated or brought into force and effect hereinafter in India including any revisions, amendments or re-enactments including without limitation rules, regulations and notifications made there under and judgments, decrees, injunctions, writs, orders and notifications issued by any court of record or any appropriate authorities, as may be in force and effect during the subsistence of the Contract.

"Change" means any change to Conditions of Contract, which is instructed or approved as a Change under **Clause** 23.

"Change Order" shall have the meaning ascribed to it in **Clause** 23.2.4.
"Commencement Date" shall mean the date of execution of the Contract by the Parties.
"Commissioning Spare Parts" means those commissioning spare parts required during the commissioning of the Works.

"Completion Certificate" has the meaning ascribed to it in **Clause** 21.3.2.

"Completion of the Works" means the achievement of the criteria set out in **Clause** 21.1 and "Complete" "Completed" "Completion" and "Completing" shall be construed accordingly and as certified by the Completion Certificate.

"Confidential Information" means the Contract and everything contained therein, all documentation, data, particulars of the Works and/or the Project Facility and/or the Project and technical or commercial information made by (or on behalf of) BMTC or obtained directly or indirectly by the Bidder or which is generated by the Bidder or any sub-bidder or any information or data that the Bidder receives or has access to as a result of the Contract, other than information:

(a) which is generally available in the public domain other than by any unauthorized actions or fault of the Bidder; or

(b) which is in the possession of the Bidder with a right to disclose;

"Contract" means the Service Level Agreement, these Conditions, Technical Conditions of Contract, and further documents (if any) which are listed in the Service Level Agreement and initialed by BMTC and the Bidder and includes any amendment thereto made in accordance with the provisions hereof.

"Bidder" (Successful Bidder) includes (without limitation to) any person, company, firm, organization, consortium with whom BMTC has entered into a Contract for execution of the Works and the permitted legal successors in title to the Bidder, but not any assignee of the Bidder.

"Service Level Agreement" means the agreement entered into or to be entered into by the Parties and forming part of the Contract.

"Bidder's Documents" means in addition to the documents mentioned in **Clause** 1.5.1, those documents to be prepared by the Bidder under the Contract including without limitation, such technical documents specified in Technical Conditions of Contract and such data, drawings, designs, design information, calculations, schedules, specifications, plans, inspection and test plans, manuals, programmes, erection and test data and all other information and documents including all eye readable or computer or other machine readable data relating to the Execution of the Works or otherwise to performance of the Contract.

"Bidder's Equipment" means all or any apparatus, machinery, equipment, vehicles, materials, plant, tools and all other things required for the Execution of the Works and the remedying of any defects to be provided by the Bidder but Bidder's Equipment excludes Equipment.

"Bidder's Insurances" means the insurance policies to be purchased and maintained in full by the Bidder.

"Contract Price" means the Contract Sum subject to such additions thereto or deductions there from as made in accordance with the Contract.

"Contract Sum" means the sum mutually agreed between BMTC or their authorized representative and Bidder as the sum payable to the Bidder for the Execution of the Works in accordance with the provisions of the Contract.

"Date of Completion of the Works" means the date certified as such in the Completion Certificate in accordance with **Clause** 21.1.

"Delay Event" means any event set out at **Clause** 18.3.

"Encumbrance" means any encumbrance such as mortgage, charge, pledge, lien,

hypothecation, security interest, assignment, privilege or priority of any kind having the effect of security or other such obligations and shall include without limitation any designation of loss payees or beneficiaries or any similar arrangement under any insurance policy pertaining to the Project Facility and/or the Works, physical encumbrances and encroachments on the Project Site.

"Equipment" means any apparatus intended to be procured for the implementation of the Works which may either be manufactured indigenously or may be procured from abroad.

"Execution of the Works" means design, procurement, supply, assembly, erection, installation, testing, commissioning, trial runs and completion of the Works and the correction of defects in the Works and all works and things required to be undertaken pursuant to the Contract and "Executed", "Execute" and "Execution" shall be construed accordingly.

"Execution Period" means the period beginning from the Commencement Date and ending on the Date of Completion of the Works.

"Force Majeure Period" means, the period commencing from the date of occurrence of a Force Majeure and ending on the date on which the Affected Party, acting in accordance with the Good Industry Practice, resumes or should have resumed such of its obligations the performance of which was excused in accordance with the Contract.

"Good Industry Practice" means the exercise of the highest degree of skill, diligence, prudence, safety and foresight in compliance with the undertakings and obligations under the Contract which would be expected from a skilled and experienced person engaged in the planning, design, execution, testing, implementation, operation and maintenance or supervision or monitoring thereof or any of them of works of the type, nature and scope similar to that of the Works.

"Intellectual Property" means copyright, all rights conferred under statute, common law or equity in relation to inventions (including patents), registered and unregistered trademarks and service marks, registered and unregistered designs, circuit layouts, confidential information, proprietary information and all other rights resulting from intellectual activity in the industrial, scientific, literary or artistic fields.

"Liquidated Damages" means those damages described in Annexure IX under **Clause** 20 to be paid or allowed by the Bidder to BMTC or their authorized representative as compensation.

"Maintenance Spare Parts" means the maintenance spare parts for the Equipment and includes the critical, replacement and breakdown spare parts.

"Milestone Event" means the completion of a specific activity to be achieved, which reflects progress in the Execution of the Works or the occurrence of an event in each case as identified as such in the Payment Schedule.

"Parties" means BMTC or their authorized representative and the Bidder and

"Party" means any one of those Parties.

"Payment Schedule" means the payment schedule described as such and set out in Annexure no VIII.

"Performance Standards" means such performance standards for the operation and maintenance of the Project Facility as may be applicable pursuant to the Contract.

"Pre - Acceptance Test" means tests described as such in the Testing Plans.

"Project" means Setting Up of Automated Vehicle Fitness Testing Station (ATS) for Testing & Inspection of Transport vehicles including Three-Wheelers, Quadricycles, Taxis, Buses and Trucks including Operations for 5 Years and Comprehensive Annual Maintenance Contract for 3 Years after initial 2 years' warranty period.

"Project Facility" shall mean the facilities as specified in the Tender document, being developed in accordance with the Project and includes all its buildings, equipment, facilities, software and systems and includes without limitation, where the circumstances so require, any expansion thereof from time to time.

"Project Facility Insurance" means the insurance policies to be purchased and maintained in force by Bidder.

"Project Site" means that part of the site under and over which the Works are to be Executed and to which any Bidder's Equipment and Equipment are to be delivered.

"Punch List Items" means items of works of a minor or snagging nature which do not affect the performance of the Equipment, where agreed with BMTC, which remain incomplete at the Date of Completion of the Works.

"Quality Assurance Plan" means that plan referred to in **Clause** 9.1.

"Relevant Authority" includes the Department of Customs and Excise, the Ministry of Finance, Ministry of Heavy Industries or any other subdivision or instrumentality thereof, any local authority, or any authority empowered by the Applicable Laws.

"Required Insurances" means collectively the Project Facilities Insurances and the Bidder Insurances.

"Required Manufacturers Warranties" means those warranties identified as such in Technical Conditions of Contract.

"Spare Parts" means the Commissioning Spare Parts and shall include such Maintenance Spare Parts as are instructed to be provided by BMTC.

"Sub-bidder" means a Sub-bidder to whom a part of the Works has been

subcontracted by Bidder or to whom the supply of any goods or materials or labour and services for the Works has been subcontracted as permitted under **Clause** 7 and the permitted legal successors in title to such person, but not any assignee of such person.

"Tax**"** means all forms of taxation, duties, fees, imposts and levies including (but without limitation) income tax including withholding tax, GST, value added tax, sales tax, service tax, octroi, entry tax, corporation profits tax, advance corporation tax, capital gains tax, residential and property tax, customs and other import and export duties, excise duties, stamp duty, capital duty, social insurance, social welfare or other similar contributions and other amounts corresponding thereto and any interest, surcharge, penalty or fine in connection therewith which may be payable by the Bidder, its Subbidders and any of their employees, and the words **"**Taxation**"** and **"**Taxes**"** shall be construed accordingly.

"Technical Conditions of Contract**"** means the document entitled Technical Conditions of Contract, as included in the Contract, and any additions and modifications to such document in accordance with the Contract. Such document includes the design and /or other technical specifications for the Works.

"Termination Date**"** means the date specified in the notice of Termination given by either Party to the other Party, from which the Contract shall stand terminated.

"Testing Plans**"** means those plans referred to in **Clause** 16.1.2 which set out the tests and inspections required to be performed by the Bidder in accordance with the Technical Conditions of Contract and the means by which the Bidder intends to conduct and satisfy such tests and inspections.

"Time for Completion**"** means the time for Completion of the Works as stated in Annexure-I: Scope of Work or such time as may be varied from time to time in accordance with the Contract, calculated from the Commencement Date.

"Training Plan" shall have the meaning assigned to it in **Clause** 28.2.

"Warranty" means an assurance from the Bidder for uninterrupted performance of the Equipment after the acceptance of the Equipment, as per the performance parameters specified under the Contract and includes any alteration, repair or replacement of any defective or damaged part/ design or material used for the Equipment at the cost of the Bidder over the Warranty Period for ensuring such uninterrupted performance.

"Warranty Period**"** means the period starting from the date of acceptance of the Equipment up to duration as stated in Annexure I under clause no. 12.2.

"Works" includes (without limitation to) design, construction & civil work of equipment foundations including allied services like test shed trimix flooring, epoxy coating for the flooring, conduiting for cables including 3-phase & Single phase cables & drainage, compressor piping, supply, installation & commissioning of suitable exhaust gas handling system & provision for fresh air ducting for all underbody

inspection pits, designing, manufacturing, assembling and functional testing prior to shipment, delivery, installation, integration of systems and system checking, testing and commissioning of the Equipment and supply of special tools, requisite software, supply of Spare Parts, Operations for 5 Years and Comprehensive Annual Maintenance Contract for 3 Years after initial 2 years' warranty period and training to the personnel, operators and mechanics of BMTC including Project Facility operations personnel and Project Facility operation trainers and necessary after sales service and maintenance support, as agreed with BMTC.

1.2 ***Interpretation***

In the Contract, unless the context otherwise requires or as otherwise expressly stated:

1.2.1 the words importing singular shall include plural and vice versa, and words denoting natural persons shall include partnerships, firms, companies, corporations, joint ventures, trusts, associations, organizations or other entities (whether or not having a separate legal entity);

1.2.2 The Technical Conditions of Contract form an integral part of the Contract and will be in full force and effect as though they were expressly set out in the body of these Conditions. Terms defined in this Annexure, and Technical Conditions of Contract shall have the same meaning throughout the Contract;

1.2.3 definitions within Clauses have the meaning ascribed hereto;

1.2.4 metric system of measurement shall be used exclusively in the Contract.

1.2.5 use of any gender includes the other genders;

1.2.6 a reference to any statute or statutory provision shall be construed as a reference to the same as it may have been, or may from time to time be, amended, modified or re-enacted;

1.2.7 any reference to a 'day' (including within the phrase 'business day') shall mean a period of 24 hours running from midnight to midnight;

1.2.8 references to times are to Indian Standard Time;

1.2.9 a reference to any other document referred to in the Service Level Agreement is a reference to that other document as amended, varied, innovated or supplemented at any time; and

1.2.10 all headings and titles are inserted for convenience only. They are to be ignored in the interpretation of the Service Level Agreement.

1.3 *Communications*

Wherever these Conditions provide for any agreement, or the giving or issuing of any consent, approval, authorization, notice, certificate, request, determination, information or report ("communication") from or by any Party such communication shall be valid and effectual only if:

(i) in writing under the hands of a duly authorized representative of such Party and delivered by hand (against receipt), sent by recognized courier, registered mail, or transmitted by facsimile transmission; and

(ii) delivered, sent or transmitted to the address for the recipient's communications as stated by BMTC.

1.4 *Confidentiality*

1.4.1 The Bidder shall disclose to BMTC any Confidential Information and other information as BMTC may reasonably require for verifying the Bidder's compliance with the Contract. Further, the Bidder shall not, without the previous written consent of BMTC, use, copy, publish, disclose or otherwise deal with, nor cause nor permit its Subbidders or any persons for whom it is contractually or otherwise responsible for, to use, copy, publish, disclose or otherwise deal with any Confidential Information, otherwise than for the performance of its obligations under the Contract.

1.4.2 The Bidder shall not without the prior written permission of the BMTC Representative:

(i) disclose the Contract or any provision thereof or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of BMTC in connection therewith, to any person other than a person employed by the Bidder in the performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purpose of such performance;

(ii) make use of any document or Confidential Information enumerated in the Contract, except for the purpose of the Contract; and

(iii) communicate or use in advertising, publicity, sales, releases or in any other medium, photographs or other reproduction of the Works under this Contract or description of the Project Site, dimensions, quantity, quality or other information, concerning the Works.

1.4.3 Any document, other than the Contract and enumerated in the Contract shall remain the property of BMTC and shall be returned (in all copies) to BMTC on completion of the Bidder's performance under the Contract, if so required by the BMTC.

1.4.4 Each Party's Confidential Information will remain the property of that Party except

as otherwise expressly provided in the Service Level Agreement. Each of the Parties will use at least the same degree of care to safeguard and to prevent disclosing to third parties the Confidential Information of the other as it employs to avoid unauthorized disclosure or publication of its own information (or information of its customers) of a similar nature, and in any event, no less than reasonable care. Each Party may disclose relevant aspects of the other Party's Confidential Information to its employees, Affiliates, subcontractors and agents to the extent such disclosure is reasonably necessary for the performance of its obligations, or the enforcement of its rights, under the Service Level Agreement; provided, however, that such Party will use reasonable efforts to ensure that such employees, Affiliates, subcontractors or agents comply with these confidentiality provisions. Each Party will be responsible for any improper disclosure of Confidential Information by such Party's employees, Affiliates, subcontractors or agents. A Party may reuse for its own purposes with third parties the terms and conditions of the Service Level Agreement, provided that (i) such use in no way may be attributed to the other Party, the Service Level Agreement or the relationship between bidder and BMTC and (ii) such use is not used in negotiations with the other Party or any of the other Party's Affiliates for any other contractual arrangement.

1.4.5 This Clause will not apply to any particular information that either Party can demonstrate (i) was, at the time of disclosure to it, in the public domain; (ii) after disclosure to it, is published or otherwise becomes part of the public domain through no fault of the receiving Party; (iii) was in the possession of the receiving Party at the time of disclosure to it and was not the subject of a pre-existing confidentiality obligation; (iv) was received after disclosure to it from a third party who had a lawful right to disclose such information (without corresponding confidentiality obligations) to it; or (v) was independently developed by the receiving Party without use of the Confidential Information of the disclosing Party.

1.4.6 In addition, a Party will not be considered to have breached its obligations under this Clause for disclosing Confidential Information of the other Party to the extent required to provide information under Right to Information, 2005, satisfy any legal requirement of a competent governmental or regulatory authority.

1.4.7 Each party shall notify the other Party promptly of any material unauthorized possession, use or knowledge, or attempt thereof, of the other Party's Confidential Information by any Person that may become known to such arty and help & cooperate in investigating or preventing recurrence of such events. Each party shall also use reasonable efforts to cooperate with the other Party in any litigation and investigation against third parties deemed necessary by the other Party to protect its proprietary rights;

1.5 ***Bidder's Documents***

1.5.1 The Bidder's Documents shall mean and include the following which shall be deemed to form a part of the Contract:

(i) Tender Document including letter forwarding the tender documents,

instructions to bidders and the conditions described in this Annexure.

(ii) Specifications of the Equipment to be furnished under the Contract in the Technical Conditions of Contract;

(iii) Bidder's bid proposal and the documents attached thereto including the letters of clarifications thereto between the Bidder and BMTC prior to the award of the Contract except to the extent of repugnancy;

(iv) all the materials, literature, data and information of any sort given by the Bidder along with its bid, subject to the approval of BMTC;

(v) Letter of award and any agreed variations of the conditions of the documents and special terms and conditions of the Contract, if any; and

(vi) such additional documents within such times and in such numbers and format as BMTC may reasonably require.

1.5.2 The Bidder shall prepare all Bidder's Documents and shall submit the Bidder's Documents to BMTC as may be required/ directed by BMTC and /or as called for in the Contract and in numbers and format required by the Contract and/ or by BMTC.

1.5A Conflict of Documents

1.1 A.1 In case of any inconsistency between any of the constituent documents of the Contract, the following shall be the supervening/prevailing order of priority for such documents:

(i) Service Level Agreement;
(ii) Technical Conditions of Contract;
(iii) Other Bidder's Documents;
(iv) General Conditions of Contract.

It is specifically clarified that in case of conflict between any timelines set out in these Conditions with those in the Tender document.

1.5 A.2 In the event of any conflict between the above mentioned documents, the decision of the BMTC shall be final and binding upon the Parties.

1.6 BMTC Instructions

1.6.1 All instructions given by BMTC or by any person executing delegated functions will be issued in writing and in such form as will be advised to the Bidder after the Effective Date.

1.6.2 Where the Bidder fails to comply with an instruction, BMTC may engage others to give effect to the instruction. All costs and charges incurred by BMTC authorized representatives in engaging others shall be paid by the Bidder to BMTC or may, without prejudice to any other method of recovery, be deducted by BMTC from any monies due to the Bidder or may be recovered as a debt due and payable to BMTC on demand.

2. BMTC

2.1 BMTC duties and authorities

The Bidder shall be appointed by and shall be responsible to, BMTC and shall carry out the duties specified in, or necessarily implied from the Contract and shall exercise the authority delegated to it by BMTC. The Bidder shall take instructions, notices, communications, decisions and approvals only from BMTC.

The BMTC authorized Representatives shall have no authority unless given by BMTC to amend the Contract, to release the Bidder of any of his duties, liabilities or obligations under the Contract, nor, create estoppel against it in respect thereof, nor except as expressly provided hereunder or elsewhere in the Contract, to order any Work involving delay or any extra payment by BMTC or their authorized representative, nor to make any variation of or in the Works nor to waive any right of BMTC authorized representatives under the Contract.

2.2 BMTC protection

The Parties acknowledge and agree that provisions in the Contract to the effect that work to be done under the Contract shall be carried out with the consent, non-objection or to the satisfaction of or be certified, determined, accepted, confirmed or inspected by the BMTC are inserted as protection to BMTC and it is the sole responsibility of the Bidder to ensure that the Works are executed in all respects in accordance with the Bidder's obligations under the Contract. The Bidder further acknowledges and agrees that no payment by BMTC or their authorized representative nor any expression or implication of satisfaction or acceptance nor any action, examination, comment, rejection, confirmation, certification, determination, consent, non-objection, approval or notice by the BMTC or failure to do the same shall restrict, debar, exclude or waive any claims, rights or actions whatsoever by BMTC for any breach of any such obligation by the Bidder.

3. COMMENCEMENT

3.1 Condition Precedent

The Contract shall become legally binding and in force only upon:

3.1.1 return of the duplicate signed copy of the Letter of Award (LOA) by selected bidder to the BMTC within 7 (seven) days of receipt of LOA; and

3.1.2 payment of Performance Security in the form of Demand Draft (DD) or an irrevocable Bank Guarantee in favour of "Chief Accounts Officer – Financial Adviser – BMTC" issued by nationalized or scheduled banks, having head office in India, payable at Bengaluru only

4. THE PROJECT SITE

4.1 Access to and possession of the Project Site

4.1.1 Save in so far as the Contract may prescribe:

(i) the extent of portions of the Project Site of which the Bidder is to be given access from time to time; and

(ii) order in which portions shall be made available to the Bidder;

BMTC will, simultaneously from the Commencement Date, give to the Bidder uninterrupted access to and possession of only so much of the Project Site as may be reasonably required by the Bidder to commence and proceed with the Execution of the Works. The Bidder represents that it shall not part with or create any Encumbrance on the whole or any part of the Project Site and shall not, without the prior written consent of BMTC, use the Project Site for any purpose other than for the purpose of the Execution of the Works and shall bear all costs and charges for any access required by it additional to those provided by BMTC.

4.1.2 The Bidder shall not be entitled to uninterrupted access to or exclusive possession of any part of the Project Site during Execution of the Works at the Project Site and the Bidder's rights of access to and possession of any part of the Project Site shall in addition be subject to:

(i) any rights of public passage or access existing over any part of the Project Site from time to time;

(ii) the right of BMTC and representatives of any statutory authority, to have access to:

(a) view the Works or any operations at the Project Site on reasonable notice; and

(b) visit any site or workshop where goods, materials or equipment are being manufactured, prepared or stored, on reasonable notice and during normal working hours, for the purposes of general inspection and of attending any test or investigation being carried out in respect of the same; and

(c) visit and use, and their staff and visitors may visit and use, any facilities provided on the Project Site for their use; and

(d) the Project Site at any time in an emergency situation as any of them (acting reasonably) considers necessary in the circumstances; provided always that such persons shall comply with all relevant safety procedures.

4.2 Unauthorized persons

The Bidder shall be fully responsible for the presence on or around or for the entry to the Project Site or for any other act, omission, default or interference affecting the Project Site or the Execution of the Works, by or caused by any person not authorized to be on the Project Site and any such act, omission, default or interference shall not be a breach of the obligations of BMTC to provide access to the Project Site. Security of the ATS shall be the responsibility of Successful bidder only.

5. CONDITION OF THE PROJECT SITE

5.1 Information from BMTC or their authorized representative

The Bidder acknowledges and agrees that any information and data on climatic, hydrological, topographical and general conditions relating to the Project Site made available to it by BMTC or their authorized representative has been done so for the convenience of the Bidder and that the Bidder enters into the Contract based upon its own investigations and determinations.

5.2 Bidder to inspect

The Bidder warrants that it has, to its complete satisfaction, examined and inspected the Project Site and its surroundings and where applicable, any existing structures or works on, over and under the Project Site and is familiar with and has satisfied itself with the Project Site conditions including the climate, topography, access to and from the Project Site, safety, availability of labour, water and electricity. No claim by the Bidder regarding misunderstanding or misapprehension in respect of matters related to this Clause shall be maintainable.

6. THE BIDDER

6.1 The Bidder's general responsibilities

6.1.1 Subject to and in accordance with the terms and conditions of the Contract, the Bidder shall to the satisfaction of BMTC, execute the Works and carry out its other obligations under and/or in relation to the Contract and provide all personnel and labour, including the supervision thereof, materials, offices, workshops, tools, machinery, equipment and all other resources and things, whether of a temporary or permanent nature, required herein, and shall assume full responsibility for the same so as to meet the Time for Completion.

6.1.2 The Bidder shall at its own expense:

(i) take full responsibility for the adequacy, stability and safety of the Works, labour, equipment and of all on-site and off-site operations and methods of manufacture, construction, and installation, commissioning, testing and acceptance procedures;

(ii) do everything necessary (including the payment of all relevant fees) to acquire

and maintain all Applicable Clearances;

(iii) at all times ensure that it has sufficient, suitable and qualified personnel at the Project Site and in sufficient number to undertake the responsibilities imposed upon the Bidder under the Contract and to provide full attention to the Execution of the Works.

6.1.3 Addressing technology obsolescence by appropriate upgradation, replacement and / or replenishment of systems deployed.

6.1.4 Keep all system software i.e. OS, antivirus, office applications etc., for Servers, PCs etc. up to date by installing regular upgrades / patches to ensure adherence to Service Level Agreement.

6.1.5 Rectification of system software problems due to crashing or malfunctioning of the OS, database or User Interface within the time limits to meet the Service Level Agreement as defined in Tender document.

6.1.6 Generation of MIS & other reports as per the requirements of BMTC.

6.1.7 Any other services which is required for the successful execution of the project.

6.2 The Bidder's representations and warranties

The Parties agree that the principal objective of the Contract is the timely completion of the Project Facilities of which the Works form an integral part and that time is the essence of the Contract. The Bidder warrants that it is fully experienced in the planning, programming, design (to the extent required by the Contract), building & construction, procurement and supply, erection, installation, testing, commissioning of equipment's for the scope, complexity, size and technical sophistication of the Works and that it possesses the level of skill and expertise commensurate with such experience, upon which skill and expertise BMTC or their authorized representative is entirely reliant and the Bidder hereby represents and warrants to BMTC:

Design (to the extent required by the Contract)

6.2.1 it has satisfied itself as to, and adopts and accepts full responsibility for any design of the Works contained in and reflected by Technical Conditions of Contract;

6.2.2 it shall exercise in the design and specifications for the Works all the skill, care and diligence to be expected of professionals experienced in and possessing all the expertise necessary for similar projects of the size, scope, complexity and technical sophistication of the Works;

6.2.3 the Works have been and will continue to be designed and specified utilizing state of the art systems, procedures and technology, high quality goods, materials and equipment and the high standards of workmanship and fabrication in compliance with Technical Conditions of Contract;

6.2.4 the Bidder further warrants that upon the Date of Completion of the Works, the Works will be in a condition which will enable BMTC to meet those Performance Standards which relate to the Works;

6.2.5 that it recognizes that the process of producing, optimizing, developing and finalizing the design of the Works will require the closest consultation, co-operation and co-ordination between itself, BMTC and any Relevant Authority and that it has taken account of the same in the Contract Sum.

Workmanship

6.2.6 it shall construct and install the Works in accordance with the approved specifications and drawings;

6.2.7 the Works will be Executed and defects, remedied in accordance with Good Industry Practice, using state of the art systems and technology and accepted professional standards, codes of practice and regulations, and shall meet the intents and objectives of the Contract and comply with all Applicable Laws and be in accordance with Technical Conditions of Contract and other requirements of the Contract;

6.2.8 the personnel to be employed by the Bidder shall be properly skilled, competent and experienced having regard to the nature and extent of the Works. BMTC may also verify their skills as & when required;

6.2.9 the Works and every part thereof will be complete in all parts, will be free from defects in materials and workmanship and will be in conformity with Technical Conditions of Contract;

Equipment

6.2.10 it will ensure that the Works will comprise only Equipment which is of sound and merchantable quality and which is manufactured and prepared in accordance with the Applicable Laws and with Good Industry Practice applicable at the time of construction and/or installation;

6.2.11 the Equipment, notwithstanding any acceptance by BMTC, shall where appropriate be manufactured specifically for the Contract and be new and unused, will be complete in all its parts, free from defects and will meet the requirements of the Contract and in particular, but without limiting the generality of the foregoing will be such that the Works as a whole and each and every part thereof shall meet Technical Conditions of Contract;

6.2.12 the information furnished in the tender documents and as updated on or before the date of the Service Level Agreement is to the best of its knowledge and belief true and accurate in all material respects as at the date of the Service Level Agreement;

6.2.13 there are no actions, suits, proceedings, or investigations pending or, to its knowledge, threatened against it at law or in equity before any court or before any other judicial, quasi-judicial or other authority, the outcome of which may result in the breach of the Service Level Agreement or which individually or in the aggregate may result in any impairment of its ability to perform any of its obligations under the Service Level Agreement;

6.2.14 it has no knowledge of any violation or default with respect to any order, writ, injunction or decree of any court or any legally binding order of any Government Instrumentality which may result in any Adverse Effect on its ability to perform its obligations under the Service Level Agreement and no fact or circumstance exists which may give rise to such proceedings that shall adversely affect the performance of its obligations under the Service Level Agreement;

6.2.15 The bidder fully indemnifies the BMTC, from any damages arising out of breach of the aforesaid conditions.

6.3 Indemnity

6.3.1 The Bidder shall at all times save harmless and indemnify BMTC from and against all claims, liabilities, expenses, costs, damages and losses suffered or incurred by BMTC including consequential losses and damages which may arise out of or in connection with any defect, damage during transportation, inadequacy or unsuitability of the design, manufacture, workmanship or materials or failure to meet in any or all respects the requirements of the Contract or the remedying thereof either by the Bidder, or BMTC.

6.3.2 BMTC rights under this **Clause** 6.3.2 are without prejudice to any other right which it may have whether at law or otherwise.

6.3.3 If any deliverable or item provided by a Party hereunder is, or in such Party's reasonable judgment is likely to become, the subject of an Infringement Claim, the providing Party, at its expense and in addition to defending the claim and paying amounts as required, will use reasonable efforts to procure for the other Party the right to use and continue using such deliverable or replace it with a non-infringing equivalent or modify it to make its use hereunder non- infringing, provided that such replacement or modification does not result in a degradation of the performance or quality of the deliverable. If such option is not available on commercially reasonable terms in the providing Party's good faith judgment, the providing Party will so notify the other Party, where upon (i) the other Party will cease use of such deliverable or Service and return it to the providing Party and (ii) the Parties will equitably adjust the Service Charges to reflect the added expenses or discontinuation of Services. In such event, the Parties will seek to establish mutually acceptable alternative arrangements and to make any appropriate adjustments to their respective obligations under Service Level Agreement.

6.3.4 Bidder undertakes to indemnify BMTC (the "Indemnified Party") from and against all Losses on account of bodily injury, death or damage to tangible personal property arising in favour of any person, corporation or other entity (including the Indemnified Party) attributable to the Indemnifying Party's negligence or willful default in performance or non- performance under Service Level Agreement.

7. SUB-BIDDERS

7.1 Subcontracting

The Bidder shall not subcontract any part of the Works without the prior consent of the BMTC. Any such consent shall not relieve the Bidder from any liability or obligation under the Contract and the Bidder shall be responsible for the acts, defaults, omissions and neglects of any Sub-Bidder, his agents, servants or workmen.

The Bidder may subcontract any part of the Works but not subcontract the whole of the Works under any circumstance.

7.2 Subbidders Warranty and Assignment of Sub-Bidders Obligations

The Bidder shall procure the assignment of warranties by the Subbidder in favour of BMTC without any costs to the account of BMTC.

In respect of the work executed, or Equipment supplied by a Subbidder, any continuing obligation of a Subbidder extending for a period exceeding that of the Warranty Period, shall be disclosed to BMTC by the Bidder and be assignable to BMTC or its nominee. The

Bidder shall ensure that the Subbidder shall at any time, assign to BMTC and at their request, such continuing obligation of a Subcontract exceeding the Warranty Period and the benefit of such obligation for the un-expired duration thereof.

7.3 Responsibility

7.3.1 Subcontracting does not relieve the Bidder from any of its liabilities or obligations under the Contract.

7.3.2 The Bidder shall be fully responsible for the acts, defaults, omissions and neglects of any Subbidder and their agents, employees, servants and workmen, as fully as if they were the acts, defaults, omissions and neglects of the Bidder.

7.4 Subcontract Terms

The Bidder shall procure that:

7.4.1 every Subbidder has knowledge of the relevant terms of the Contract and provisions in the Contract relating to confidentiality and each Subcontract entered into by the Bidder shall be let on such terms and conditions as are reasonably necessary for the Bidder to ensure compliance with its obligations under the Contract;

7.4.2 the Subbidder provides like warranties and indemnities as given by the Bidder to BMTC or their authorized representative.

8. SUFFICIENCY OF THE CONTRACT SUM

The Bidder shall be deemed to have satisfied himself before entering into the Contract as to the correctness and sufficiency of the Contract Sum and of the rates and prices.

The Contract Sum is a lump sum fixed price and will not be adjusted save as expressly provided in the Contract.

9. QUALITY ASSURANCE PLAN

9.1 The Bidder shall within 30 days (thirty days) from the Commencement Date submit a Quality Assurance Plan. The Bidder shall also submit to the BMTC all inspection / test reports and processes and quality standards which are adhered to while construction of Project facilities and for manufacturing of Equipment as per Quality Assurance Plan at least 15 (fifteen) days before the Pre- dispatch inspection date. BMTC or its nominee or any other person designated by BMTC may inspect / witness the construction of Project facilities and equipment manufacturing processes and other information provided by the Bidder as mentioned in the Quality Assurance Plan. The Bidder agrees that neither the submission of Quality Assurance Plan nor the submission of quality / test certificate releases the Bidder from any of its responsibilities, obligations, or liabilities (including repair of civil work or

replacement of any Equipment or part of the Works damaged during the carrying out of any Tests) under the Contract.

9.2 The Bidder shall at its own cost provide all access, assistance and facilities to enable BMTC to verify the implementation of the Quality Assurance Plan.

10. SPARE PARTS

10.1 The Bidder shall be responsible, at its own cost, for the provision of the Spare Parts. Such cost shall include all costs such as customs duty for imported Spare Parts, left behind items, replacement or breakdown spare parts as well as costs for storage and insurance costs in relation to the maintenance of the Spare Parts in storage.

10.2 The Bidder shall ensure that:

(i) as at the Completion of the Works, there is a full complement of Spare Parts safely stored and packed in accordance with the Contract.

(ii) if a Maintenance Spare Part is used by the Bidder during the commissioning/ Acceptance Tests due to shortage of Commissioning Spare Parts, the Bidder shall immediately replace, at his own cost, the Maintenance Spare Parts to ensure a full complement of Maintenance Spare Parts at the end of commissioning/ Acceptance Tests.

10.3 The Bidder warrants the performance of all Maintenance Spare Parts for period that expires on the later of:

(i) the manufacturer's warranty period for the applicable Maintenance Spare Parts.; and
(ii) the Warranty Period.

The Bidder shall revise and update any list of Spare Parts in accordance with the instructions of the BMTC, and a list of Spare Parts shall be submitted to the BMTC before the Pre- commissioning of any part of the Works to which such Spare Parts relate.

10.4 Where the Bidder is to supply the Spare Parts in accordance with this Clause 10.4 without prejudice to the foregoing, the Spare Parts shall be delivered to BMTC in accordance with the Contract and without prejudice to **Clause** 13 the packing and storage of the Spare Parts shall be in accordance with the Contract.

11. ENVIRONMENTAL COMPLIANCE

The Bidder shall comply with all environmental requirements stipulated in the Contract and with all Applicable Laws and regulations having application to the Project Facility, including but not limited to standards for noise and vibration levels and airborne and waterborne pollutants.

12. WATER & ELECTRICITY

12.1 General arrangements

12.1.1 The Bidder shall be responsible for making all its arrangements for paying all charges in connection with consumption of electricity, calibration gases, water and the disposal of sewage and other waste as may be necessary for the Execution of the Works.

12.1.2 BMTC will make arrangement of water & electricity at site. Bidder will be responsible for paying water & electricity charges for the Execution of the Works which includes, erection, installation, testing and commissioning and Design, construction & civil work of equipment foundations including allied services like test shed trimix flooring, epoxy coating for the flooring, conduiting for cables including 3-phase & Single phase cables & drainage, compressor piping. Floor requires excavation, earthwork and filling, labelling. Trimix flooring is recommended for 18-ton design load. The suitable exhaust gas handling system is to be selected & supplied, installed & commissioned by the bidder. Bidder should also provide fresh air ducting for all underbody inspection pits.

12.1.3 No bills shall be pending at the time of handover.

13. DELIVERY TO THE PROJECT SITE

13.1 Delivery to the Project Site

13.1.1 The Bidder supplying indigenously manufactured Equipment shall at its own risk and expense, be fully responsible for the proper packing, marking, loading, delivery up to Project Site, insurance, freight costs, interface management, detailed design, detailing, coordination, value engineering, specialist system procurement, provision, erection and/or installation, testing, commissioning, documentation, training and defects rectification. In case of imported Equipment, the Bidder shall be responsible for shipment costs, transit insurance charges from FOB port of shipment or Airport upto the Project Site, charges for custom clearances etc. All transit insurance charges for transit up to FOB Port of shipment or Airport as well as loading charges on to the ship/ airplane shall be responsibility of the Bidder supplying imported Equipment.

13.1.2 When marking any Equipment, the Bidder shall be responsible for ensuring that such Equipment and any part thereof and their transportation containers are properly marked and consigned.

13.2 Packing List

A packing list itemizing the contents of each case shall be enclosed in each package. A copy of the packing list, together with dispatch details shall be provided forthwith by the Bidder upon dispatch to the BMTC. The Bidder supplying indigenously manufactured Equipment shall provide all attendance, handling and transport up to and including off-loading into the appropriate Project Site storage area.

13.3 Importation

The Bidder shall be responsible at its own cost for obtaining any Applicable Clearances necessary for the export of Equipment, from the country of origin.

13.4 Documents

Upon dispatch of each shipment of significant items of Equipment, the Bidder shall notify the BMTC by facsimile or email of the description of the Equipment and the point and means of the dispatch and the estimated time and point of delivery and the Bidder shall furnish BMTC with all relevant documentation in respect of such Equipment, including without limitation:

13.4.1 packing lists;

13.4.2 certificate of origin;

13.4.3 factory inspection test certificate;

14. OWNERSHIP OF EQUIPMENT AND OTHER PROVISIONS

14.1 Passing of property

14.1.1 Equipment supplied or to be supplied pursuant to and in compliance with the terms of the Contract shall become the property of BMTC at whichever is the earliest of the following times:

(i) when any sum is included in a Certificate of Payment in respect thereof; or

(ii) for Equipment manufactured indigenously when such Equipment is delivered to the Project Site pursuant to the Contract and for imported Equipment, when such Equipment is loaded on to the aircraft or when the Equipment passes over the ship's rail.

14.1.2 Equipment in which property has passed to BMTC shall be in the care and possession of the Bidder solely for the purposes of the Works and shall not be within the ownership or disposition of the Bidder. Notwithstanding the ownership of the Equipment in accordance with Clause 14.1.1 the responsibility for care and custody together with the risk of loss or damage of such Equipment remains with the Bidder pursuant to **Clause** 30.5.1.

14.2 Marking of Equipment

Where the property in Equipment passes to BMTC, the Bidder shall so far as be practicable and it has not done so previously, set the same aside and mark the same as the property of BMTC. The Bidder shall procure that the BMTC at any time upon reasonable notice may inspect any Equipment which have become the property of BMTC and shall grant to the BMTC authorized representatives or procure the grant of access to the Bidder's

premises for such purposes or any other premises where such Equipment may be located.

14.3 Exclusion of Lien

Neither the Bidder or a Subbidder nor any other person shall have a lien on or other property interest in any Equipment which have vested in BMTC under this **Clause** 14 for any sum due or accepted due to the Bidder, Subbidder or other person and the Bidder shall take such steps as may be necessary to ensure that the title of BMTC and the exclusion of such lien and other property interest are brought to the express notice of Subbidders and other persons dealing with or transporting any such Equipment.

14.4 Delivery of Equipment upon Termination

Upon Termination or upon termination of the performance of the whole or any part of the Works before Completion of the whole of the Works, the Bidder shall deliver Equipment to BMTC, the property in which has vested in BMTC by virtue of this **Clause** 14. If it shall fail to do so BMTC may enter any premises of the Bidder, any Subbidder or other person or any off site place of manufacture or source of Equipment (and the Bidder hereby grants BMTC the necessary licence to do so and undertakes to procure the same right for BMTC from all Subbidders and other persons as the case may be) and seize such Equipment and recover the expense involved in so doing from the Bidder.

14.5 Manufacturer's warranties

Without prejudice to the Bidder's obligations and liabilities under the Contract, the Bidder must obtain for BMTC, from the respective manufacturers, legally enforceable warranties for the Equipment which shall ensure to the benefit of BMTC for the entire term of the warranties.

14.6 Bidder's Equipment

14.6.1 All Bidder's Equipment provided by the Bidder or its Subbidders shall, when brought on to the Project Site, be deemed to become the property of BMTC in the event of Termination of Works on account of default of the Bidder and to be exclusively intended for the Execution of the Works and the Bidder shall not remove the same or any part thereof, except for the purpose of moving it from one part of the Project Site to another, without the consent of the BMTC. Provided that such consent shall not be required for vehicles engaged in transporting any staff, labour, Bidder's Equipment to or from the Project Site.

14.6.2 The Bidder shall upon written request by the BMTC produce to the BMTC all documents evidencing title to or the contractual basis of the Bidder's right to use any item of Bidder's Equipment. In

the event of failure to comply with such a request within 7 (seven) days, without prejudice to any other rights or remedies available to BMTC, BMTC may withhold any payments otherwise due to the Bidder in accordance with the Contract.

14.6.3 In case of import of any Bidder's Equipment necessary for the Execution of the Works, the Bidder shall be solely responsible for (without limitation to) its transportation, importation, customs clearances and re-exports.

14.7 BMTC not liable for damage

BMTC shall not at any time be liable for the loss of or damage to any of the Bidder's Equipment.

14.8 Conditions of hire of Bidder's Equipment

14.8.1 With a view to securing, in the event of Termination, the continued availability, for the purpose of Executing the Works, of any hired Bidder's Equipment, the Bidder shall not bring on to the Project Site any hired Bidder's Equipment unless there is an agreement for the hire thereof (which agreement shall be deemed not to include an agreement for hire purchase) which contains a provision that the owner will, on request in writing made by BMTC within **[**7 (seven)**]** days after the Termination Date and on BMTC undertaking to pay all hire charges in respect thereof from such date, hire such Bidder's Equipment to BMTC on the same terms in all respects as the same was hired to the Bidder, save that BMTC shall be entitled to permit the use thereof by any other bidder employed by it on occasion of the Bidder's termination.

14.8.2 The Bidder shall upon request made by the BMTC at any time in relation to any item of hired Bidder's Equipment immediately notify to the BMTC Representative in writing the name and address of the owner thereof and shall certify that the contract for the hire thereof contains a provision in accordance with the requirements of **Clause** 14.8.1. The Bidder shall also upon request as aforesaid give a like notification (but without certification) in regard to any Bidder's Equipment held under a contract of hire purchase thereof.

14.8.3 In the event of BMTC entering into any agreement for the hire of Bidder's Equipment pursuant to **Clause** 14.8.1 all sums properly paid by BMTC under the provisions of any such agreement and all costs incurred by it (including stamp duties) in entering into such agreement shall be deemed to be part of the costs of Executing the Works.

14.9 Re-export of Bidder's Equipment

In respect of any Bidder's Equipment which the Bidder imports for the purpose of the Execution of the Works, the BMTC may use its reasonable endeavors to assist the Bidder if so requested and to the extent it is able to do so in procuring any Applicable Clearances for the re-export of such Bidder's Equipment by the Bidder upon the removal thereof as aforesaid.

14.10 Approval not implied

The operation of **Clause** 14 shall not be deemed to imply any approval by the BMTC of the Bidder's Equipment or any part thereof, or other matters referred to therein nor shall it prevent the BMTC right to order the removal of any such Bidder's Equipment or part thereof, at any time.

14.11 Incorporation of Clause into Subcontracts

The Bidder shall, where entering into any key or major subcontract for the Execution of any part of the Works, incorporate in such subcontract (by reference or otherwise) the provisions of this **Clause** 14 in relation to plant, equipment and tools and temporary works brought on to the Project Site by the Subbidder.

14.12 Re-vesting and removal of Bidder's Equipment

Upon removal of any Bidder's Equipment which have been deemed to become the property of BMTC under **Clause** 14.6 with the BMTC consent, as aforesaid, the property therein shall be deemed to re-vest in the Bidder and upon Completion of the Works the property in the remainder of such Bidder's Equipment as aforesaid shall, subject to the termination provisions of the Contract, re-vest in the Bidder who shall remove the same. If the Bidder shall fail to remove any Bidder's Equipment as aforesaid within such reasonable time after Completion of the Works as may be allowed by the BMTC or should fail to comply with its obligations under **Clause** 34.3, BMTC may:

14.12.1 sell any such Bidder's Equipment; or

14.12.2 return any hired Bidder's Equipment at the Bidder's expense to the person, firm or company from whom such Bidder's Equipment was hired by the Bidder and after deducting from any proceeds of sale the cost, charges and expenses of and in connection with such sale and in connection with such return as aforesaid, BMTC shall, subject to any right of set-off, pay the balance (if any) to the Bidder but to the extent that the proceeds of any sale or return are insufficient to meet all such costs, charges and expenses the excess shall be a debt due from the Bidder to BMTC and shall be deductible or recoverable by BMTC accordingly as aforesaid.

15. LABOUR AND BIDDER'S PERSONNEL

15.1 Labour Compliances

15.1.1 In the employment of labour for the Execution of the Works, the Bidder shall comply

and shall require its Sub bidders to comply without limitation, with all requirements of any Applicable Law relating to the employment of workmen or any subsequent modification or re-enactment thereof including but not limited to, matters relating to timely payment of wages and allowances, payment of minimum wages, payment of overtime, grant of leave, payment of workmen's compensation, working hours, safety, maternity benefits, holidays, framing of standing orders, disciplinary action against employees, payment of provident fund contributions, payment of gratuities and payment of bonuses, drinking water, food etc.

15.1.2 ***Medical Facilities at Project Site:***

The Bidder shall, at its own cost, provide first aid and medical facilities, at the Project Site as may be prescribed by the BMTC, on advice of medical authority in relation to the strength of the Bidder's staff and workmen employed on the Works, directly or through petty bidders or Sub-Bidders.

15.2 Bidder to indemnify

The Bidder shall indemnify BMTC against any claim for legal action arising out of the Applicable Laws due to the failure of non-compliance of the provisions of the Applicable Laws which arise out of or in connection with the employment of any labour for the Execution of the Works and penalty or any other amount levied by the authorities from BMTC, shall be recoverable from the payments due to the Bidders or from the security deposit or both, as debt due and payable on demand.

15.3 Engagement of Labour

The Bidder shall make its own arrangements for the engagement of all labour, local and otherwise, skilled, semi-skilled and unskilled, as may be required for the proper and timely Execution of the Works and shall use all diligence in arranging for a sufficient and suitable supply of such labour but all such arrangements in India shall be in accordance with the general local usage and subject to the Applicable Laws.

15.4 Project Site records and returns

The Bidder shall maintain and keep at the Project Site, wage books and time sheets showing the wages paid to and time worked by all labour employed by the Bidder and its Sub-bidders in and about the Execution of the Works or any part thereof and all records, forms, declarations, registers, notices, and copies of filings made with labour authorities as are required to be maintained by the Bidder pursuant to the Applicable Laws and the Bidder shall produce such wages books, time sheets and records for inspection by BMTC.

15.5 Bidder's Personnel

15.5.1 General

The Bidder shall at all times ensure that it has sufficient, suitable and qualified personnel at the Project Site and in sufficient number to undertake the responsibilities

imposed upon the Bidder under the Contract and to provide full attention to the Execution of the Works.

15.5.2 The Bidder's Project Organization Chart

15.5.2.1 The Bidder's Project Organization Chart to be submitted by the Bidder to the BMTC Representative shall show the proposed organization to be established by the Bidder for carrying out the Works and shall be consistent with the Bidder's project organization chart submitted with the Tender submission. The chart shall evidence that the Bidder has the requisite organization in place and that it has designated and proposed suitable persons as Key Personnel, whose identities and biodata it shall include with the Bidder's Project Organization Chart, to supervise the Execution of the Works and to deal with BMTC as appropriate.

15.5.2.2 The Bidder shall promptly notify the BMTC Representative of any proposed revision or alteration of the Bidder's Project Organization Chart.

15.5.3 Key Personnel

15.5.3.1 The BMTC shall be entitled to interview any or all of the persons designated and proposed as Key Personnel before deciding whether or not to consent to their appointment. If BMTC interviews any of the proposed Key Personnel, BMTC shall be deemed to consent to such Key Personnel if it makes no objection within **[**3 (three)**]** days of the interview of the last proposed person to be interviewed. If BMTC objects to any of the proposed Key Personnel within such 3 (three) day period, then the Bidder must nominate a replacement or replacements, as applicable within **[**7 (seven)**]** days and this Clause 15.5.3.1 applies to such nomination.

15.5.3.2 The Key Personnel are to be engaged throughout the period of the Contract and shall include suitably qualified and experienced personnel for one or more of the positions as set out in the Annexure I under clause no. 11 (2).

15.5.4 Technical Assistants

15.5.4.1 The Bidder and, where appropriate any Subbidder shall provide and employ in connection with the Execution of the Works only such engineers and technical assistants as are skilled and experienced in their respective callings and such engineers, managers, sub-representatives, foremen and leading hands as are competent to give proper supervision to the work they are required to supervise.

15.5.5 Removal of Bidder's employees

The BMTC may object to and require the Bidder to immediately remove from the Works at the Bidder's expense any person employed by the Bidder or its Subbidders in relation to the Works and such person shall not be employed again upon the Works without the written permission of the BMTC. Any person so removed from the Works shall, unless the BMTC specifies otherwise, be replaced, at the Bidder's expense as soon as possible by a competent substitute approved by the BMTC.

15.6 Bidder shall meet or exceed the minimum wages as per Minimum Wages Act and comply with labour laws of Govt. of Karnataka. The bidder shall also be responsible for ensuring compliance to the provisions of other applicable labour laws, EPF laws and other relevant laws.

15.7 In case of any eventualities (including disability, death etc.) anytime during the contract period including any incidents, accidents with the personnel deployed by the bidder for the project, bidder shall ensure appropriate measure to control the damage, if any and to do good to the personnel or its family as applicable. Bidder shall hold BMTC indemnified for any claim may be arising out of the same.

15.8 The salary of such manpower shall be credited directly through online banking mechanisms like ECS / NEFT / RTGS etc. for all manpower. A record of the payments made in this regard should be maintained by the bidder.

15.9 The bidder is required to comply with labour law for weekly off and other benefits.

15.10 Bidder shall submit escalation chart for the entire duration of the contract with details like contact details, designation, role for the project etc. of all the concerned persons.

15.11 The personnel assigned by bidder to perform the Services shall be employees of bidder as per requirements defined in the tender document, and under no circumstances shall such personnel be considered employees of BMTC or any other Government authorities.

15.12 Bidder must provide clear definition of the role and responsibility of each individual personnel. Bidder shall have a defined hierarchy and reporting structure for various teams that shall be part of the project.

15.13 A table should be provided with the indicative list of resource categories and the minimum resource requirements estimated for the project. However, bidder shall independently estimate the teams size required to meet the requirements of Service levels as specified as part of this tender document, bidder shall propose qualified personnel with adequate skills levels to manage the system

15.14 Replacement of Resources:

Provide replacement resource of equal or better qualification and experience. If BMTC objects to the appointment, bidder shall not assign the individual to that position and shall seek an alternative candidate.

- The document under the sub heading of warranty should have a calculation matrix/Manpower requirement/Man-hour/ rate of any kind to determine the labor cost associated to any kind of breakdown during this warranty period.
- The document should also include a detailed Manpower management plan for 3 years, post 2 years of warranty period for the comprehensive annual maintenance of the ATS in the following format:

Sl. No.	Role	Month wise time to be spent by each personnel (in days)					Total
		Year 1	Year 2	Year 3	Year 4	Year 5	
1	Xxxxxxxxxxx						
2	Xxxxxxxxxxx						
3	Xxxxxxxxxxx						
4	Xxxxxxxxxxx						
5	Xxxxxxxxxxx						
6	Xxxxxxxxxxx						
7	Xxxxxxxxxxx						
8	Xxxxxxxxxxx						
9							
10							
TOTAL							

16. TESTING

16.1 ***General***

16.1.1 All materials and workmanship shall be of the respective kinds and standards described in the Contract and in accordance with BMTC or authorized representative's instructions and shall be subjected from time to time to such tests as provided for in the Contract. The Bidder shall provide such assistance, instruments, machines, consumables and artificial loads and labour and materials as are normally required for examining, measuring and testing any work and the quality, weight or quantity of any material used and shall supply samples of materials before incorporation in the Works for testing as set out in the Testing Plans.

16.1.2 The Testing Plans shall be submitted to BMTC in the manner stated in the Contract or as otherwise directed by BMTC.

16.1.3 BMTC or their authorized representatives or its nominee and any other person designated by BMTC may attend and witness the Equipment at any manufacturing stage.

16.1.4 The Bidder agrees that neither the execution of any test nor the issue of any test certificate releases the Bidder from any of its responsibilities, obligations, or liabilities (including repair of replacement of any Equipment or part of the Works damaged during the carrying out of any Tests) under the Contract.

16.2 Testing Costs

The cost of making any test or inspection under the Contract shall be borne by the Bidder if such test or inspection is intended by or provided for in the Contract or should have reasonably been anticipated by the Bidder as likely to be required including any costs relating to accommodation and travel incurred by the BMTC personnel for such test/ inspection. There will be no additional visit to equipment manufacturing plants to witness the equipment manufacturing. Bidder shall arrange the visit to manufacturing site at the time of pre- dispatch inspection of equipment.

Save, as aforesaid, where any test is ordered by the BMTC which is neither intended nor provided for by the Contract nor could reasonably have been anticipated by the Bidder, then the cost of such test shall be borne by the Bidder if the test shows any workmanship or Equipment not to be in accordance with the Contract or the BMTC instructions, or if the test was required as a result of any failure of the Bidder to comply with its obligations under the Contract.

16.3 Pre-Acceptance Tests and Project Site Tests

16.3.1 The Bidder must:

(i) procure the carrying out of the pre-dispatch inspection tests and the Project Site Tests; and

(ii) not allow an item of Equipment to be transported to the Project Site unless it has successfully completed the Pre-Acceptance Tests.

16.3.2 Within **[**7 (seven)**]** days of completion of any Pre-Acceptance Tests or the Project Site Tests, the Bidder must give the BMTC a report of the test results in a form approved by the BMTC.

16.3.3 The BMTC may, within **[**7 (seven)**]** days of receipt of a report produced in accordance with **Clause** 16.3.2, give the Bidder a notice that it considers:

(i) such report is deficient in any way, and that it directs the Bidder to correct and re- submit the report and the Bidder must re-submit the report;

(ii) in its reasonable opinion, that the Bidder has failed the test; or

(iii) that the relevant test has been successfully performed.

16.3.4 If, in the reasonable opinion of the BMTC the Equipment/ Works fail any Pre-dispatch Inspection Test or Project Site Test (as applicable), the Bidder must:

(i) give the BMTC notice of the cause of the failure and the remedial action to be taken;
(ii) remedy the cause of the failure; and
(iii) reschedule, re-perform and report on results of the test in accordance with this **Clause** 16.3.

16.4 Pre-dispatch Inspection Tests

The Bidder shall carry out the Pre-dispatch Inspection Tests of each Equipment in the presence of a team of 4 – 5 persons as decided by BMTC as per the agreed plan prior to the delivery of the Equipment at the Bidder's site.

16.5 Acceptance Tests

The Bidder shall carry out the Acceptance test of each Equipment in presence of BMTC as per the agreed plan with the BMTC or their authorized representative after the completion of commissioning of the Equipment, at the Project Site.

17. TIME FOR COMPLETION

The Bidder shall complete the Works within the Time for Completion or such other time as may be determined in accordance with **Clause** 18.

18. EXTENSION OF TIME FOR COMPLETION

18.1 Bidder's notice of event likely to cause delay

The Bidder shall closely monitor the progress of the Works and shall give written notice to BMTC

18.1.1 as soon as it can foresee any incident, circumstance and/or event of any nature affecting or likely to affect the progress of the Works such that the Completion of the Works will be or is likely to be delayed; or

18.1.2 should it have been unable to foresee such an incident, circumstance and/or event, then as soon as it becomes aware of the commencement of the incident, circumstance and/or event which has affected or is likely to affect the progress of the Works such that Completion of the Works will be or is likely to be delayed.

18.2 Reasons for delay and extension of time

It shall be a condition precedent to any extension of time by BMTC under any provision of the Contract, that in respect of each and every incident, circumstance or event identified in the notice given in accordance with **Clause** 18.1, the Bidder shall, as soon as possible after such notice but in any event not later than **[**30 (thirty)**]** days after such notice or such longer period as BMTC may in its absolute discretion determine, notify BMTC,

Government of Karnataka in writing of any factors and the relevant Contract provision which it considers may entitle it to claim an extension of time together with a statement, providing details, reasons, explanation and any further substantiation for the delay.

18.3 Delay Events

Subject to the other provisions of this **Clause** 18, the Bidder will only be entitled to an extension of the Time for Completion where a delay to the achievement of Completion is caused by:

18.3.1 the Bidder not being given access to the Project Site or any part thereof; or

18.3.2 a Change instructed other than where such Change is instructed as a consequence of any default or breach of the Contract by the Bidder; or

18.3.3 any act, omission, default or breach by BMTC; or

18.3.4 a Force Majeure Event.

18.4 BMTC to determine extension

Subject always to proper compliance by the Bidder with the provisions of this **Clause** 18, BMTC or their authorized representative shall determine any extension of the time for completion and shall notify the bidder accordingly.

18.5 Compliance

18.5.1 (i) the Bidder shall constantly use its reasonable endeavors to prevent and/or minimize delay in the progress of the Works, howsoever caused, and to prevent Completion of the Works being delayed or further delayed beyond the Time for Completion and the Bidder shall not be entitled to an extension of time in respect of any cause of delay nor for any period of delay which by the exercise of reasonable endeavors could be avoided or reduced (to the extent that such could have been reduced). The onus of proving that the Bidder has exercised all reasonable endeavors, and that despite such endeavors, the delay could not be avoided or reduced, shall in all cases rest with the Bidder;

(ii) the Bidder shall not under any circumstances be entitled to an extension of time where the delay or likely delay is, or would be, attributable to the default, breach, negligence, improper conduct or lack of endeavor of the Bidder or any persons for whom it is contractually or otherwise responsible;

(iii) the Bidder shall have kept and maintained such records (including those referred to in the notices under this **Clause** 18 **[**Extension of Time for Completion**]** as may be reasonably necessary to support any claim for an extension of time it may subsequently wish to make;

18.5.2 The BMTC shall not be obliged to take into account any circumstances which are not notified to it in accordance with the periods referred to in this **Clause** 18 but may upon the written request of the Bidder extend the said periods if it considers the request for such extension reasonable.

19. PROCEDURE FOR CLAIMS

19.1 Notice of claims

If the Bidder considers that it may have grounds to claim any additional payment or any extension of time pursuant to any Clause of the Conditions or otherwise, it shall in addition to compliance with any other procedure or obligation in relation thereto, give notice to the BMTC, with a copy to BMTC, within fourteen **[**14 (fourteen)**]** days after the event giving rise to the claim has first arisen. The notification shall include details of the clause under which the claim is made, the circumstances in which the claim arises and details of the records that the Bidder will maintain to substantiate the amount of its claim.

19.2 Substantiation of claims

Within **[**28 (twenty-eight)**]** days, or such lesser time as may be reasonably required by the BMTC, of giving notice under **Clause** 19.1, the Bidder shall send to the BMTC an account giving detailed particulars of the amount claimed and the grounds upon which the claim is based. Where the event giving rise to the claim has a continuing effect, such account shall be considered to be an interim account and the Bidder shall, at such intervals as the BMTC may reasonably require, send further interim accounts detailing the aggregate amount of the claim and any further grounds upon which it is based. In cases where interim accounts are sent to the BMTC, the Bidder shall send a final account within **[**28 (twenty-eight)**]** days of the end of the effects resulting from the event. The Bidder shall, if required by the BMTC so to do, copy of all accounts sent to the BMTC pursuant to this **Clause** 19.2.

20. LIQUIDATED DAMAGES

20.1 Liquidated Damages

20.1.1 If the Bidder fails to Complete the Works in accordance with the Contract so that the Date of Completion of the Works has not occurred within the Time for Completion or in the event the Bidder defaults or is in breach of any of its obligations under the Contract or the Bidder is non-compliant with or negligent in relation to any condition specified under the Contract or causing damages to BMTC property at respective site, then the Bidder shall pay or allow to BMTC, Government of Karnataka Liquidated Damages for such default/ breach/ delay/ non-

compliance/damage which is a genuine pre-estimation of and reasonable compensation for the loss and damage that will be suffered by BMTC, for every day which shall elapse between the Time for Completion and the date stated in the Completion Certificate as being the Date of Completion of the Works or for every day for which such breach or default (if capable of remedy as determined by the BMTC) continues till the date of remedy. Liquidated damages in the event of delayed delivery beyond agreed schedule will be levied at 0.5 percentage per week limited to maximum 5 percentage of the contract value. Additionally, penalty will be applicable for all the incidences mentioned above. The extent of penalty for such incidences will be decided by BMTC, if, bidder is failed to meet agreed timelines indicated in Clause 14 of Annexure-I: Scope of Work.

20.1.2 The payment of Liquidated Damages does not in any way relieve the Bidder from any of its obligations to complete the Works or from any other obligations and liabilities of the Bidder under the Contract.

20.1.3 For the avoidance of doubt and without prejudice to any continuing obligations of the Bidder under the Contract or otherwise, the issue of any Completion Certificate does not relieve the Bidder in respect of Liquidated Damages which have accrued up to the date of such Completion Certificate, but which have not yet been paid by the Bidder.

20.1.4 In the event of Liquidated Damages exceeding this cap, the BMTC has a right to invoke "Termination Clause"

20.1.5 The BMTC reserves the right to recover the liquidated damages by adjusting the same from the payments due to bidder or by invoking the Performance Bank Guarantee which shall immediately be replenished upon invocation

20.2 Genuine Pre-estimate of Damages

The Parties recognize the expense and inconvenience likely to be incurred from any need to prove the loss and damage that will be suffered by BMTC in the event of a failure by the Bidder to achieve Completion of the Works by the relevant Time for Completion or for breach or omission or non-performance of any obligation/ condition by the Bidder under the Contract. The Parties acknowledge that the Liquidated Damages is a genuine pre-estimation of and reasonable compensation for the loss and damage that will be suffered by BMTC in the event of any such failure on the part of the Bidder.

21. COMPLETION OF WORKS

21.1 The Date of Completion of the Works shall be the date upon which the following criteria have been satisfied or waived in writing by BMTC at its sole discretion:

(i) the Execution of the Works, other than the performance of obligations to be performed during the Warranty Period, has been completed in accordance with the Contract, save in respect of the Punch List Items;

(ii) all outstanding work which BMTC requires to be completed before issue of the Completion Certificate, has been satisfactorily completed;

(iii) the Bidder has been issued the acceptance certificate post the completion of the Acceptance Tests; and

(iv) all the training obligations of the Bidder to be performed during the Execution Period have been satisfactorily completed in accordance with the Contract;

(v) the Bidder has provided to the BMTC any amendment or update of any information and documentation, which is required by the BMTC;

(vi) any Spare Parts and other items which the Bidder is required to supply and deliver to BMTC in accordance with the Contract and which were used or consumed during the any of the tests mentioned in the Contract have been replaced by the Bidder at its own cost.

21.2 The Bidder acknowledges that until the Works are Complete, BMTC shall not be able to commence the Project Facility operations.

21.3 Application for and issue of the Completion Certificate

21.3.1 The Bidder shall make a written application to BMTC for a Completion Certificate not later than **[**2 (two)**]** days of from the conclusion of the Acceptance Tests. Such application shall be accompanied by an undertaking to finish any outstanding work in accordance with **Clause** 21.3.2.

21.3.2 BMTC shall, within **[**7 (seven)**]** days after receiving the Bidder's application in accordance with **Clause** 21.3.1 issue the Completion Certificate to the Bidder with a copy to their authorized representatives stating the date upon which the Works achieved Completion and specifying any outstanding work, if any, which the Bidder is required to complete and the period or periods within which such work is required to be completed, such work to include:

(a) the Punch List Items; or

(b) any other outstanding work notified to the Bidder by BMTC.

21.4 Completing Punch List Items and any other outstanding works

21.4.1 During the Acceptance Tests, the Bidder shall provide in writing to BMTC reasonable notice of its reasonable requirements with respect of access to and use of the Works for the carrying out of:

(i) the outstanding Works including any Punch List Items specified in the Completion Certificate;

(ii) any rectification, repair or replacement of any items in accordance **Clause** 22.1.

21.4.2 BMTC shall use reasonable endeavors to secure such access for the Bidder. When carrying out such work the Bidder shall comply with all reasonable instructions of BMTC with regard to the safety of the Works and the ongoing performance by BMTC of its obligations and shall complete the work in such manner that, so far as reasonably practicable, does not prevent, hinder or otherwise interfere with the performance of BMTC of its obligations and the exercise of its rights during the Project Facility operations period.

21.4.3 The Bidder shall complete any Punch List Items specified in the Completion Certificate within the time instructed reasonably by BMTC.

22. WARRANTY PERIOD

22.1 The BMTC shall have the right, but not the obligation, to instruct the Bidder in writing to Execute all such work of repair, amendment, replacement of any parts of the Equipment, rectification of defects, imperfections or other faults in the Works and any part thereof, as the case may be, at any time during the Warranty Period.

22.2 All such work instructed under **Clause** 22.1 shall be carried out by the Bidder at its own expense.

22.3 At all times during the Warranty Period BMTC shall be fully entitled to Execute all work of repair, amendment, replacement of any parts of the Equipment, rectification of defects, imperfections or other faults in the Works and any part thereof, as the case may be, by its own workmen or by other bidders and if the necessity thereof shall in the opinion of the BMTC be due to the use of materials or workmanship not in accordance with the Contract or the neglect or failure on the part of the Bidder, BMTC shall be entitled to recover from the Bidder the cost thereof or may deduct the same from any monies due or that become due to the Bidder.

22.4 Continuing Obligations

22.4.1 Notwithstanding the expiry of the Warranty Period, the Bidder shall remain liable for the fulfilment of any obligation incurred under the provisions of the Contract prior to the expiry of the Warranty Period which remains unperformed upon the expiry of the Warranty Period and, for the purposes of determining the nature and extent of any such obligation, the Contract shall be deemed to remain in force between the

Parties.

22.4.2 Notwithstanding the expiry of the Warranty Period and / or maintenance contract if any, the Bidder shall provide necessary Spare Parts, sales, services and support for the performance of the Equipment on payment basis to be mutually agreed between the Bidder and BMTC.

22.5 Maintenance Obligations

22.5.1 The Bidder shall take full responsibility for the maintenance and upholding of the permanent structures at the Project Site and the site offices (if any) used by the Bidder during the Warranty Period.

22.5.2 The Bidder shall ensure that its maintenance obligations are performed in such a manner as will permit the proper performance by BMTC in its operation of the Project Facility and so as not to affect the activities of the Project Facility users.

23. CHANGES

23.1 General

23.1.1 The Bidder shall not carry out any Change except as directed by BMTC. The BMTC shall have the power to, from time to time, for the Execution of the Works, to instruct the Bidder, by notice in writing to carry out Changes without prejudice to the Contract.

23.1.2 The Bidder acknowledges and accepts that no Change shall in any way vitiate or invalidate the Contract.

23.1.3 Subject to the terms of this **Clause** 23, the Bidder shall be required to perform any Change howsoever initiated and be bound by the same conditions as far as applicable, as though the said Changes occurred in the Contract.

23.1.4 BMTC reserves the right to increase or decrease the quantities of items under the Contract but without any change in the unit price for such item. Such a Change in the quantity shall not be subjected to any limitations for the individual items but the total Change for all such items shall be limited to the estimate (if any) provided.

23.2 Procedure for Changes

23.2.1 BMTC has the right to initiate a Change at any time by either:

(i) instructing in writing a Change Order in which case the Bidder shall comply with **Clause** 23.2; or

(ii) issuing a written notice proposing a Change (a "Change Notice").

23.2.2 Within [14 (fourteen)] days of receipt of a Change Notice, the Bidder shall provide to BMTC a written statement setting out detailed particulars of any effect the proposed Change would have on the Works and/or on any other provisions of this Contract if the proposed Change is effected (a "Change Notice Response").

23.2.3 Following receipt of a Change Order, the Bidder must immediately implement the Change subject to the following terms:

(i) the Contract Sum will, be amended in accordance with the principles to be mutually agreed between BMTC and the Bidder;

(ii) any extension of time will be determined and BMTC is entitled to take account of the Bidder's estimate (if any) when determining such extension of time;

(iii) these Conditions (as amended from time to time) will apply to the Change as though it formed part of the Works.

23.2.4 Following receipt of a Bidder's Change Notice Response, BMTC may either:

(i) issue a written Change Order to the Bidder, on such terms and conditions as BMTC may deem appropriate; or

(ii) withdraw the Change Notice.

The Bidder shall not be entitled to any costs or extension of time as a result of preparing a Change Notice Response.

23.2.5 If:

(i) the Bidder fails to comply with its obligation under **Clause** 23.2; or

(ii) if the BMTC rejects the information provided by the Bidder pursuant to **Clause** 23.2; BMTC shall be entitled, following notification to the Bidder, to engage a third party to perform the Change, in which case the Bidder shall cooperate fully with any such third party.

23.3 Bidder's Changes

23.3.1 The Bidder may, from time to time during its performance of the Contract, propose to BMTC any Change which the Bidder considers:

(i) necessary for the proper Execution of the Works; or

(ii) which adopted will:

(a) substantially reduce the cost of Executing, maintaining and operating the Works or the Project; or

(b) improve the efficiency or value to BMTC of the Completed Works (including a reduction in the life cycle costs associated with the Project); or

(c) otherwise be of benefit financial or otherwise, to BMTC and such proposal must be in writing and shall be in the form of and contain such information as required of a Change Notice Response referred to in **Clause** 23.2.2.

23.3.2 Where **Clause** 23.3.1(i) applies BMTC may either:

(i) issue a written Change Order to the Bidder and the Bidder shall implement the Change in accordance with **Clause** 23.2.2; or

(ii) reject the Change proposed by the Bidder.

The Bidder shall not be entitled to any costs or extension of time as a result of preparing a proposal in accordance with **Clause** 23.3.1.

23.3.3 BMTC may, at its sole discretion, accept or reject the Bidder's proposed Change and failure by BMTC to respond within **[**14 (fourteen)**]** days shall be deemed to be a rejection.

23.3.4 If in the opinion of the Bidder, any Change proposed by BMTC prevents or is likely to prevent the Bidder from fulfilling his obligations under the Contract, the Bidder shall notify the BMTC thereof in writing and the BMTC shall decide forthwith whether or not the same shall be carried out by the Bidder. In case the BMTC confirms that the Change shall be carried out, the Bidder's obligations under the Contract shall be modified to an extent as may be mutually agreed to between the Parties.

23.4 Omissions

23.4.1 The Bidder acknowledges that a Change may involve the omission of any part or parts of the Works up to 10% (ten percent) of the total Contract Price and the Bidder acknowledges and agrees that BMTC may engage others to carry out that part or parts so omitted.

23.4.2 On the omitted Works, the Bidder shall be entitled to payment, 10% (ten percent) of the value of omission which shall include Bidder's profits and overheads.

23.5 Valuation of Changes

23.5.1 The valuation of a Change to be paid by BMTC to the Bidder, or by the Bidder to BMTC, as the case may be, shall be calculated as follows:

(i) the Parties will endeavor to agree to the valuation; and

(ii) failing agreement under **Clause** 23.5.1 (i) within a reasonable time (but no more than **[**28 (twenty-eight)**]** days after the BMTC direction in accordance with **Clause** 23.2.4 (i), BMTC will determine the valuation, subject to the following:

(a) in the event that the Change involves additional works, the increase to the Contract Price will be no more than the estimate (if any) provided; and

(b) in the event that the Change involves the omission of part of the Works or results in a saving to the Bidder, the reduction in the Contract Price will be no less than the estimate (if any);

the following valuation principles shall apply:

1. where the varied work is similar in character to and executed under similar conditions to work priced as per the Payment Schedule, such work shall be valued at the applicable rates and prices in the Contract;

2. where the varied work is not of a similar character to or not executed under similar conditions to work priced in the price breakdown then the BMTC shall establish a new rate for such work based upon the rates or prices contained in the Contract insofar as may be reasonable making such allowances thereto by way of additional or deductions as may be necessary to take account of any dissimilarity in the character of the work or the conditions under which the work was Executed;

3. where work is omitted, the rates and prices in the Contract shall be used to value the work omitted provided that if part only of an item of work is omitted their BMTC shall establish a new rate or price by which to value the omitted work which shall be fair and reasonable.

4. where the varied work cannot be properly valued in accordance with the provisions of **Clauses** 23.5.1(ii) (1), (2) or 3 above, the BMTC shall establish a new rate or price for such work which shall be fair and reasonable.

23.5.2 Without prejudice to **Clause** 23.2, the BMTC may, in its absolute discretion, instruct a Change Order in circumstances where, in its absolute discretion, the Bidder will fail to meet any of its obligations under the Contract or where it is necessary on account of some default or breach of the Contract by the Bidder or those for whom it is responsible for, in which case the Bidder shall not be entitled to any extension of time or any increase in the Contract Sum, and any adjustment to the Time for Completion.

24. INTELLECTUAL PROPERTY

24.1 Intellectual Property

24.1.1 All Intellectual Property which is proprietary to BMTC or the Bidder, shall be the exclusive property of BMTC or the Bidder respectively, as the case may be.

24.1.2 All Intellectual Property jointly developed by BMTC and the Bidder or developed by the Bidder for the purposes of the performance, execution and implementation of the Works shall be the exclusive property of BMTC. The Bidder shall however be entitled to use such Intellectual Property for a period of 5 (five) years without payment of any charges to BMTC provided that such Intellectual Property is used by the Bidder itself for development of facilities owned by the Bidder. The use of any Intellectual Property for any facility other than facility owned by the Bidder shall be permitted subject to the execution of a non-exclusive and revocable license agreement with BMTC on such terms and conditions as may be agreed to between BMTC and the Bidder.

24.2 Infringing Matter

24.2.1 The Bidder warrants and represents that:

(i) it has all rights and licenses necessary to grant, assign and transfer to BMTC licenses and assignments in accordance with this **Clause** 24.1.2; and

(ii) there is and will be no infringement of any Intellectual Property, in respect of the rights licensed and transferred to BMTC pursuant to **Clause** 24.1.2 or assigned otherwise used in connection with the Works.

24.2.2 The Bidder shall indemnify and hold harmless BMTC against all issues, claims, damages, liabilities, costs and expenses (including legal costs) incurred by it in respect of any breach of the warranty in **Clause** 24.2.1.

24.2.3 If either BMTC or the Bidder is prevented from operating or using the Works or any Intellectual Property or any part thereof ("Infringing Matter"), the Bidder must at its own expense, in addition to its other obligations under the Contract, take all steps necessary to procure for BMTC the right to operate or use the Infringing Matter for its intended purpose.

24.3 Patent Rights and Royalties

24.3.1 Royalties and fees for patents covering equipment's, materials, articles, apparatus, devices or processes used in the Works shall be deemed to have been included in the Contract Sum. The Bidder shall satisfy all demands that may be made at any time for such royalties or fees and the Bidder shall be liable for any damages or claims for

patent infringements and shall keep BMTC indemnified in this regard. The Bidder shall, at his own cost and expense, defend all suits or proceedings that may be instituted for alleged infringement of any patents involved in the Works and in case of any award of damages, shall pay for such damages. In the event any apparatus or equipment or any part thereof furnished by the Bidder, is in a suit or proceeding is held to constitute infringement and its use is enjoined, the Bidder shall at his option and his own expense, either procure for BMTC, the right to continue the use of such apparatus, equipment or part thereof, replace it with non-infringing apparatus or equipment or modify it so it becomes non-infringing.

25. INSURANCES

Bidder shall at his own expense effect and maintain all risk insurance policy (Bidder's All Risk Policy) in the joint names of the BMTC and the Bidder, the name of the former being placed first in the policy covering the following and shall be in full force up to completion of Maintenance Period.

In case of Joint Venture, name of all JV members shall be included in the Insurance Policy. The insurance shall be against all losses or damages from whatever causes, other than excepted risks, for which the bidder is responsible under the contract. The insurance cover shall be for the period of contract and also for the Period of Maintenance, for loss or damage arising from a cause prior to commencement of the Period of Maintenance, and for any loss or damage, occasioned by the bidder in the course of any operations carried out for the purpose of complying with his obligations during Operation and Maintenance Period.

Such insurance shall be affected with an insurer and in terms approved by the BMTC. The bidder shall submit the Evidence of Insurance Cover with the receipts of payment of the current premiums.

25.1 Third Party Insurance

Before commencing the execution of the Works, the bidder shall insure against his liability for any material or physical damage, loss or injury which may occur to any property or life including that of the BMTC or to any person, including any employee of the BMTC, by or arising out of the execution of the Works or in the carrying out of the Contract. The sum insured shall be equal to Work Order Value.

25.1.1 Workmen's Insurance:

The BMTC shall not be liable for any payment in respect of any damages or compensation payable according to law in respect or in consequence of any accident or injury or loss of life to any workman or other person in the employment of the Contractor or any sub-agencies. The bidder shall insure against such liability with an insurer approved by the BMTC for sum of the established norms during the entire period till completion of Period of Maintenance. The bidder shall

also indemnify the BMTC against all claims which may be made upon the BMTC, whether under the Workmen's Compensation Act or any other statute in force, during the currency of this contract or at common law in respect of any employee of the bidder or of sub-agencies and shall be at its own expense effect and maintain until the term of the Contract, with an Insurance Company, approved by the BMTC, a policy of Insurance against such risks and deposit such policy or policies with the BMTC from time to time.

25.1.2 Without prejudice to the other rights of the BMTC against the bidder in respect of such default, the BMTC may so insure and shall be entitled to deduct the premiums paid along with his service charges from bidder for non-compliance from any sums payable to the bidder.

25.1.3 The bidder shall be responsible for any liability which may not be covered by the insurance Policies referred to above and also for all other damages to any person, animal or defective workmanship in carrying out of this Contract, whatever, may be the reasons due to which the damage shall have been caused.

25.1.4 The bidder shall also indemnify and keep indemnified the BMTC against all and any costs charges or expenses arising out of any claim or proceedings relating to the Works and also in respect of any award of damage or compensation arising there from.

25.1.5 The bidder, in case of re-building or reinstatement after fire, shall be entitled to such extension of time for completion as may deem fit by BMTC, but shall, however not be entitled to reimbursement by the BMTC or any shortfall or deficiency in the amount finally paid by the Insurer in settlement of any claim arising as set out herein.

25.1.6 Insurance by Sub-bidders:

Without prejudice to his liability under this **Clause** 25.1.6, the bidder shall also cause all nominated Sub-bidders to effect, for their respective portions of the works, similar policies of insurance in accordance with the provisions of this Clause and shall deposit or cause to deposit with the BMTC such policies. The bidder shall not permit Sub-bidder to commence work at the site unless the said insurance Policies are submitted. In the event of failure of the Sub-bidder to take out such a policy of Insurance before commencing the works at the site, the bidder shall be responsible for any claim or damage attributable to the said Sub-bidder.

25.1.7 Period of Policies:

All the insurance covers for full amount as detailed in bid document shall be kept in full force (alive) during the entire period of the contract (till end of AMC).

25.1.8 Remedy on bidder's Failure to Insure:

If the bidder fails to effect and keep in force the insurances referred to above, or any other

insurance which he may be required to effect under the terms of the Contract, then and in any such case the BMTC may effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by the BMTC as aforesaid from any monies due or which may become due to the bidder, or recover the same as debt due from the bidder.

26. PAYMENT

26.1 Payment Schedule

The Payment Schedule shall be as per the **Annexure: VIII - Terms of payment**.

26.2 Terms of Payment

The Terms of Payment shall be as provided in the **Annexure: VIII - Terms of payment**.

26.3 Currency of Payment

The Contract Price and all payments to be made to the Bidder in respect thereof shall be Indian Rupees.

26.4 BMTC right to set off

BMTC shall, notwithstanding any provision to the contrary included in the Contract, be entitled to deduct from and set off against any amount due to the Bidder under the Contract, any amount or amounts which the Bidder is liable to pay to BMTC under the Contract.

26A PAYMENT CERTIFICATES

i) The bidder shall submit to the BMTC statements of the value of the work completed.

ii) The BMTC shall check the bidder's statement and certify the amount to be paid to the bidder as per contract payment schedule after taking into account any credit or debit for the month.

iii) The value of work executed shall be determined by the BMTC.

iv) The value of work executed shall comprise the value of the milestone achieved and work program attached to the contract.

v) The value of work executed shall include the valuation of Change in Scope (Variation), if any.

vi) The BMTC may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificatein the light of later information.

27. TAXES AND DUTIES

27.1 Bidder to pay Taxes

Unless specifically stated elsewhere in the Contract, the Bidder is solely liable for payment of, and warrants that it will pay, or ensure the payment of:

27.1.1 all Taxes (all applicable taxes including GST imposed by central and state government such as custom duty, excise, VAT, octroi etc.);

27.1.2 all contributions payable by any Applicable Law, award and pursuant to any contract with all industrial or trade union or other association of employees or otherwise with respect to or ascertained by reference to the wages, salaries or other compensation paid to employees of the Bidder or its Subbidders in respect of the Works, including Taxes or contributions for workers' compensation, unemployment or sickness benefit, old age benefit, welfare funds, pensions and disability insurance;

27.1.3 the cost of all import or export licenses if required in respect of the bidder's Equipment's and Spare Parts;

27.1.4 the cost of any port dues including (but not by way of limitation) warfage dues, storage charges, quay rent, craneage, shipping dues, pilotage fees, anchorage, berthage and mooring fees, quarantine dues, loading, porterage and overtime fees for any goods, materials and Bidder's Equipment's and Spare Parts to be used in connection with the Execution of the Works;

27.1.5 all charges and other expenses in connection with the landing and shipment of all goods and equipment and any part thereof, materials and other things of whatsoever nature brought into or dispatched from India for the purposes of the Contract; and

27.1.6 the bidder indemnifies and keeps indemnified BMTC against all liability for payment of all of the above Taxes, assessments and contributions, duties, costs and fees and all liability arising in respect of any non-payment;

27.1.7 any addition of tax till completion of operation period of project.

27.2 Withholding Tax / Income Tax deducted at source

27.2.1 The Bidder shall be responsible for payment of all Taxes on the income, surcharge on income tax and corporate tax in respect of the Contract, irrespective of the mode of contracting. BMTC shall not in any way be liable for payment of such taxes. BMTC, Government of

Karnataka shall be entitled to deduct in accordance with Applicable Law, Income Tax or withholding tax or other deductions (as the case may be), from any payments made to the Bidder, and the amount so deducted shall be deemed to be a payment made to the Bidder. BMTC shall provide a certificate certifying the deduction so made.

27.3 Operation Cost

The Bidder on its own cost will appoint operational manpower as per guideline of Indian labour Law.

The safety of the operational staff will also be taken into consideration.

27.4 General

27.4.1 The Bidder must provide sufficient information regarding the nature and cost of the Works to enable all the relevant statutory obligations of BMTC that are dependent upon that information to be satisfied.

27.4.2 The Bidder shall fully indemnify, save harmless and defend BMTC including its officers, servants, agents and subsidiaries as well as the BMTC from and against any and all loss and damages arising out of or with respect to failure of the Bidder (a) to comply with Applicable Laws and Applicable Clearances and/or (b) to make payments of Taxes relating to the Bidder's Sub bidders and representatives income or other Taxes required to be paid by the Bidder without reimbursement hereunder and/or (c) to pay amounts due as a result of materials or services furnished to the Bidder or any of its Sub bidders which are payable by the Bidder or any of its Sub bidders or any other person employed or engaged by the Bidder in connection with the Works.

28. OPERATIONS AND MAINTENANCE MANUALS AND TRAINING

28.1 Operation & Maintenance Manual

28.1.1 The bidder shall prepare and submit Operation and Maintenance Manuals to BMTC considering all information in respect of the design, installation, erection, supply, extension, repair, operation and maintenance of the Works, any parts thereof and any special directions or recommendations from the relevant manufacturers of any Equipment and must itself provide written instructions where such are not available from such manufacturers.

28.1.2 The Operation & Maintenance Manual must be prepared:

(i) based on all relevant instruction manuals and special directions or recommendations from the relevant manufacturers of any Equipment or parts thereof obtained in accordance with **Clause** 28.1.1.

(ii) so as to provide BMTC with such detail and

information as may be necessary for use by BMTC in order to operate, maintain, dismantle, reassemble, adjust, upkeep and uphold all parts of the Works and the Works as a whole;

(iii) based on a maintenance plan for each part of the Works that is consistent with and intended to ensure that, each part achieves any design life specified in respect thereof in the Contract;

(iv) based on Good Industry Practice;

(v) in full consideration of the experience, level and technical background of BMTC personnel and the Bidder's training-related obligations under the Contract.

28.1.3 During the period of the Acceptance Tests, the Bidder must update and revise the Operation & Maintenance Manual as necessary and as may be required by BMTC, to reflect the completion of all of the Bidder's obligations under the Contract including all defects and warranty obligations.

28.1.4 The Bidder warrants that adherence to the Operation & Maintenance Manual will facilitate and ensure the operation and maintenance of the Project Facility at the levels of capacity, safety, efficiency, reliability and maintainability required by the Contract.

28.1.5 Within 1 (one) month prior to the Warranty Period, the Bidder shall update and revise the Operation & Maintenance Manual as necessary and as may be required by BMTC.

28.2 Training

The Bidder shall submit Training Plan to the Employer and shall include any suggestion or inputs of the BMTC.

28.2.1 The Bidder shall provide comprehensive training in the operation and maintenance of the Works to Project Facility operation trainers and Project Facility operations personnel in accordance with the Training Plan mutually formalized or to be formalized between the Bidder and the BMTC ("Training Plan") in order to procure BMTC objective of the timely, efficient, economic and safe operation and maintenance of the Works and Project Facilities.

28.2.2 Without limiting its obligations under the Contract, the Bidder shall adhere to the principles and procedures contained in the approved Training Plan, and any approved amendments or supplements thereto. The Bidder shall revise the Training Plan from time to time as directed by BMTC and as and when further Project Facility operation trainers and Project Facility operations personnel are required by BMTC to be trained, which training shall be undertaken by the Bidder without the right to any additional payment or an extension of time.

28.2.3 During such period as they may be being so trained or retrained by, or otherwise under the control of the Bidder pursuant to the provisions of the Contract, the Project Facility operation trainers and Project Facility operation personnel shall for the purposes of control and responsibility (but for the avoidance of doubt without any obligation to provide remuneration to such personnel or any responsibility in respect of Taxation and insurance of such personnel) to the extent permitted by the Applicable Laws, be deemed to be the servants of the Bidder.

28.2.4 For the purposes of providing the training pursuant to this **Clause** 28.2 and so as to enable the Project Facility operation trainers and Project Facility operations personnel to familiarize themselves with the Works, the Bidder shall allow and procure access as necessary to the Project Site, places off the Project Site where Equipment is being manufactured and tested.

28.2.5 The Bidder represents and warrants that:

(i) the numbers, qualifications and levels of experience specified by the Bidder in its Training Plan shall be such as is required to provide BMTC with Project Facility operation trainers and Project Facility operations personnel in sufficient numbers and of sufficient qualifications and experience properly to operate and maintain the Project Facility in accordance with the Contract and the Operation & Maintenance Manual; and

(ii) the training of adequate numbers of suitably qualified Project Facility operation trainers and Project Facility operations personnel has been or will be fully and properly undertaken under the provisions and in accordance with the terms and conditions of the Contract in order to secure the availability of a sufficient number of skilled and experienced personnel properly to undertake at all times during the Project Facility operations period in a timely, efficient, economic and safe manner, under the supervision of BMTC or otherwise, the day to day operations of the Project Facility and the performance of routine and preventative maintenance thereof.

(iii) The cost and expense of providing the accommodation and travelling of the Project Facility operation trainers and Project Facility operations personnel incurred in training pursuant to this **Clause** 28.2 shall be borne by Bidder.

28.3 Manufacturer's Warranties

28.3.1 Without prejudice to the Bidder's warranties in the Contract, the Bidder shall obtain for BMTC, the Required Manufacturers Warranties for the Equipment in accordance with Technical Conditions of Contract and must obligate the respective manufacturers at their sole expense to rebuild, remove and replace Equipment which has defects and deficiencies in substantially the same manner and on terms and conditions to those contained in the Contract and, where required by BMTC, must travel to and from and perform such activities at the Project Site.

28.3.2 At the request of BMTC, the Bidder must seek to obtain from the manufacturers of the Equipment referred to in **Clause** 28.3.1 extended warranty coverage.

28.3.3 The warranty period for any Equipment or any part must be extended for a period equal to the period that such item cannot be operated as a result of a defect and deficiency or as a result of any deficiency or damage caused by another item of Equipment, and in respect of extended warranties, the Bidder must use its best endeavors when requested by BMTC to assist in enforcing such warranties and guarantees.

28.3.4 The installation of any and all Equipment in the Works must be in strict accordance with the manufacturers' requirements and the Contract, and without prejudice to the Bidder's warranties contained in the Contract, in the event that BMTC seeks to enforce a claim based upon a manufacturer's warranty, and if such manufacturer fails to honour its warranty based in whole or in part, on a claim of defective installation, BMTC is entitled to enforce the manufacturer's warranty against the Bidder in accordance with the terms of the warranty, or, at BMTC option, the Bidder must defend and indemnify BMTC from and against any liability in respect of such defect and deficiency, provided however, that a claim of defective installation is not a defence to any warranty claim by BMTC.

29. BMTC

29.1 BMTC obligations

Notwithstanding anything contained in the Contract and in addition to and not in derogation or substitution of any of its other obligations under the Contract, BMTC shall:

(i) use reasonable endeavors to assist the Bidder to obtain from Statutory Authorities all Applicable Clearances other than those which are BMTC responsibility.

(ii) use reasonable endeavors to assist the Bidder in the procurement of the peaceful use of the Project Site by the Bidder under and in accordance with the provisions of the Contract and without any let or hindrance from any Relevant Authority or persons claiming through or under it/them; and

(iv) upon written request from the Bidder, use reasonable endeavors to assist the Bidder with procuring assistance in obtaining access to all necessary infrastructure facilities and utilities, including water, electricity and telecommunication facilities at rates and on terms no less favorable to the Bidder than those generally available to commercial customers receiving substantially equivalent facilities/utilities.

(v) Monitoring of overall timelines, SLAs and calculation of penalties, Liquidated Damages accordingly.

(vi) Issuing the Final Acceptance Certificate on successful deployment of the software application, hardware deployed and for other components of the Scope of Work (wherever required).

(vii) Provide sign off on the deliverables of the project including design documents etc.

30. BIDDER'S COVENANTS

30.1 Urgent repairs

If, by reason of any accident or failure or an emergency or other event occurring to, in or in connection with the Works or any part thereof during the period of the Contract, any repair shall, in the opinion of BMTC, be urgently necessary and the Bidder is unable or unwilling or not available at once to do such repair, BMTC may by its own or other workmen do such repair as BMTC may consider necessary. If the repair so done by BMTC is work which, in the opinion of the BMTC, the Bidder was liable to do at its own expense under the Contract, all costs and charges properly incurred by BMTC in so doing shall within **[**14 (fourteen)**]** days from the date of receipt of the claim be paid by the Bidder to BMTC or their authorized representative or may without prejudice to any other method of recovery, be deducted by BMTC from any monies due or which may become due to the Bidder or may be recovered as a debt.

30.2 Improper Equipment

The BMTC, without prejudice to the generality of its powers, shall have the authority to issue instructions (which shall be effected by the Bidder with all reasonable speed and at its sole expense without any right to an extension of time) from time to time for:

30.2.1 the removal from the Project Site, within such time or times as may be specified in the instruction, of any Equipment or any other part of the Works which, in the opinion of the BMTC, are not in accordance with the Contract;

30.2.2 the substitution of proper and suitable Equipment or any other part of the Works;

30.2.3 the removal and proper re-Execution, notwithstanding any previous test thereof or interim payment therefor, of any work which, in respect of any workmanship by the Bidder is not, in the reasonable opinion of the BMTC, in accordance with the Contract; and

30.2.4 such testing, as it may consider necessary or desirable following any instruction issued pursuant to this Clause.

30.2.5 In case of the replacement or substitution of the equipment, there should be a proper timeline, clearly mentioning the maximum time by which the equipment is replaced or restored (in working condition). The document should also mention that the cost of the restoration or replacement shall be the burden of the bidder.

30.3 Illegal gratification

30.3.1 Bribe, commission, gift or advantage: Any bribe, commission, gift or advantage given or offered by the Bidder directly or through its partner, agent, officer or BMTC authorized representatives, or to any person / institution connected with BMTC , in relation to obtaining or the execution of this or any other Contract with the BMTC shall in addition to any criminal liability which the Bidder may incur, subject the Bidder to termination of the Contract and all other Contracts with BMTC, and liability for payment of any loss or damage to BMTC, resulting from such termination. BMTC shall be entitled to deduct the amounts so payable from any money / moneys due to the Bidder alone, or jointly under the Contract or any other contract with BMTC. The Bidder shall not be due, nor shall be paid any compensation whatsoever for any loss, alleged or actual, suffered by the Bidder when the Contract is so terminated.

30.3.2 Monetary dealing of Bidder with employee of BMTC: The Bidder shall not lend or borrow money from, or enter into any monetary dealings or transactions directly or indirectly, with any employee of BMTC, and if the Bidder does so, BMTC or their authorized representative shall be entitled forth-with to terminate the Contract and all other Contracts with BMTC. The Bidder shall be liable to pay compensation for any loss or damage to BMTC resulting from such termination and BMTC shall be entitled to deduct the amounts so payable from the money(s) due to the Bidder.

30.3.3 Settlement of dispute as to commission of such offence: If any question or dispute as to the commission of any such offence arises under Sub-clauses (bribe, commission, gift or advantage) and (monetary dealer of Bidder with employee of BMTC), the same shall be settled by BMTC, in such manner as the BMTC shall consider fit and proper, and such decision shall be final and binding.

Terminology related to Corrupt or Fraudulent Practices

a. "fraudulent practice" means a misrepresentation or omission of facts or disclosure of incomplete facts, in order to influence a procurement / selection process or an execution of a contract to the detriment of the BMTC, and includes collusive practice among bidders (prior to or after bid submission) designed to establish

bid prices at artificial non-competitive levels and to deprive the BMTC of the benefits of the free and open competition.

b. "Coercive practice" means impairing or harming or threatening to impair or harm, directly or indirectly, any persons or property to influence any person, participation or action in the Selection Process;

c. "Undesirable practice" means (i) establishing contact with any person connected with or employed or engaged by BMTC with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Selection Process; or (ii) having a Conflict of Interest; and

d. "Restrictive practice" means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Selection Process.

30.3.4 Without prejudice to the rights of the BMTC under Clause above and the rights and remedies which the BMTC may have under the LOI or the Agreement, if an Bidder or Implementation Agency, as the case may be, is found by the BMTC to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Selection Process, or after the issue of the LOI or the execution of the Agreement or implementation of the project, such Bidder or Successful Bidder may not be eligible to participate in any tender issued by the BMTC during a period of 2 (two) years from the date such Bidder or Successful Bidder, as the case may be, is found by the BMTC to have directly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice, as the case may be.

30.4 Avoidance of Damage to Roads and Bridges

30.4.1 Bidder to prevent damage to roads and bridges

30.4.1.1 The Bidder shall use every reasonable means to prevent any of the highways, railway or bridges communicating with or on the routes to the Project Site (including access and link roads) from being damaged or injured by any traffic of the Bidder or any of its Subbidders. In particular, the Bidder shall select routes, choose and use vehicles and restrict and distribute loads so that any such extraordinary traffic as will inevitably arise from the moving of plant and materials to and from the Project Site shall be limited as far as reasonably possible and so that no unnecessary damage or injury may be occasioned to such highways, railways and bridges. In case of any damage or injury to the same, the Bidder's warrants indemnifying and holding harmless BMTC from and against claims, proceedings, damages, costs, charges or expenses in respect of the said damage.

30.4.1.2 Should it be found necessary for the Bidder to move one or more loads of Bidder's Equipment, machinery or pre-constructed units or part of units of works over part of a highway, railway or bridge, the moving whereof is likely to damage any highway, railway or bridge unless special protection or strengthening is carried out, then the Bidder shall before moving the load on to such highway, railway or bridge give notice to the appropriate authority of the load to be moved and obtain the required approval of the said authorities for its proposals for protecting or strengthening the said highway, railway or bridge. The Bidder shall be responsible for the cost and expenses of any necessary work for the protection or strengthening the said highway, railway or bridge.

30.4.2 Access routes

The Bidder shall be deemed to have been satisfied as to the safety, suitability and availability of access routes up to the Project Site. Without prejudice to the generality of the foregoing:

30.4.2.1 BMTC shall not be responsible for any claims which may arise from the use or otherwise of any access route to, from and over the Project Site;

30.4.2.2 BMTC does not guarantee the suitability or availability of particular access routes and all costs due to non- suitability or non-availability, for the use required by the Bidder, of access routes shall (as between the Parties) be borne by the Bidder;

30.4.2.3 the Bidder shall provide such signs or directions along access routes to, from and over the Project Site as required by the Contract and shall obtain any permission which may be required for the provision of such signs and directions.

30.4.3 Bidder not to interfere

All operations necessary for the Execution of the Works or any part thereof shall, so far as compliance with the requirements of the Contract permits, be carried on so as not to interfere unnecessarily or improperly with any or with the convenience of the public, or the access to, use and occupation of public or private roads or footpaths or any properties (adjoining the Project Site or otherwise) whether in the possession of BMTC or of any other person.

30.4.4 Waterborne traffic

Where the nature of the Works is such as to require the use by the Bidder of waterborne transport the forgoing provisions of this Clause 30.4 shall be construed as though "road" included a lock, dock, sea wall or other structure related to a waterway and "vehicle" included craft, and shall have effect accordingly.

30.5 Care of the Works, Liability for Accidents and Damage

30.5.1 Bidder to take full responsibility for care of the Works

30.5.1.1 The Bidder shall bear full risk in and take full responsibility for the care of the Works and Equipment (and, without limitation for the care of any works carried out on the Project Site by other bidders) from the Commencement Date until **[**14 (fourteen)**]** days after the date of issue of the Completion Certificate, when such responsibility for the care of the Works and Equipment shall pass to BMTC as instructed to the Bidder by the BMTC.

Provided that the Bidder shall take full responsibility for (i) the care of any outstanding Works and Equipment for incorporation therein which it undertakes to finish during the Warranty Period until such outstanding Works have been completed pursuant to the Contract and for (ii) the care of the Works or any part thereof which may require repair or remedy during the Warranty Period and for any part of the Works affected thereby, for the period that such Works are under repair or remedy by the Bidder.

30.5.2 Responsibility to rectify loss or damage

30.5.2.1 If any loss or damage happens or occurs to the Works or any part thereof, or to any Equipment during the period for which the Bidder is responsible for their care the Bidder shall rectify the loss or damage at the Bidder's risk and cost, so that the Works and Equipment conform in every respect with the provisions of the Contract and are to the satisfaction of the BMTC.

30.5.3 Damage to persons and property

The Bidder indemnifies and keeps indemnified BMTC against all losses and claims for death, injuries or damage to any person or any property whatsoever which may arise out of or in consequence of the Execution of the Works and the remedying of any defects therein and against all claims demands, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

30.6 Clearance of the Project Site

On Completion of the Works, the Bidder shall clear away and remove from the Project Site all equipment's, surplus materials, rubbish and temporary works of every kind and leave the whole of the Project Site and the Works clean and in a workmanship condition, tidy and in an aesthetically pleasing appearance to the satisfaction of BMTC. The Bidder shall, unless otherwise instructed in writing by BMTC, remove all signs of temporary construction facilities such as haul roads, work areas, structures,

foundations of temporary works, stockpiles of excess or waste materials and other vestiges of construction prior to the issue of the Completion Certificate.

30.7 Penalty for Delayed Services / Late Delivery

If the bidder fails to supply, install and commission the instruments as mentioned in the tender or perform unsuccessful operation during five years, as mentioned in the work order within due date, the bidder is liable to pay 0.5 % of order value per week of delay subject to a maximum of 5 % beyond due date. Such money will be deducted from security deposit or from amount due to the bidder after due notification to the bidder. The BMTC reserves the right to cancel the order in case of excessive delay.

30.8 Suspension of Works

BMTC reserves the right to suspend and re-instate the Execution of the whole or any part of the Works or the delivery of any Equipment, without invalidating the provisions of the Contract. The order for suspension or re- instatement shall be issued by the BMTC to the Bidder in writing vide a suspension order and the same shall be binding on the Bidder. The Bidder shall during any suspension, properly protect and secure the Works and the goods and Equipment's and shall not remove any goods or Equipment's from the Project Site without the prior consent of the BMTC and the Bidder shall take all reasonable measures to minimize the costs and losses of the suspension to BMTC. The Bidder shall undertake any necessary action instructed by the BMTC to remedy the circumstances that led to the suspension and the Bidder shall notify the BMTC immediately upon completing such action. Upon resumption of the Works, the Bidder shall immediately undertake an examination of the affected parts of the Works and shall make good any deterioration or defect in or loss of the Works, the Equipment or any part thereof that may have occurred during the suspension. The Time for Completion of the Works shall not be extended if the issue such a suspension order was due in any way to the act, default, omission or breach by the Bidder.

31. FORCE MAJEURE

31.1 Force Majeure - Obligations of the Parties

31.1.1 "Force Majeure" shall mean any event beyond the control of BMTC or of the Bidder, as the case may be, and which is unavoidable notwithstanding the reasonable care of the party affected, and which could not have been prevented by exercise of reasonable skill and care and good industry practices and shall include, without limitation, the following:

(i) War, hostilities, invasion, act of foreign enemy and civil war;
(ii) Rebellion, revolution, insurrection, mutiny, conspiracy, riot, civil commotion and terrorist acts;

(iii) Strike, sabotage, unlawful lockout, epidemics, quarantine and plague;

(iv) Earthquake, fire, flood or cyclone, or other natural disaster.

As soon as reasonably practicable but no more than 48 (forty-eight) hours following the date of commencement of any event of Force Majeure, an Affected Party shall notify the other Party of the event of Force Majeure setting out the date, nature, extent, proof and the damage cause by the Force Majeure event.

31.1.2 Political Events

a) Change in Law, other than any Change in Law for which relief is provided under the Service Level Agreement;
b) expropriation or compulsory acquisition by the BMTC any material assets or rights of the bidder;
c) unlawful or unauthorized revocation of, or refusal by BMTC or any of its agencies to renew or grant any clearance or Consents required by the bidder to perform its obligations without valid cause, provided that such delay, modification, denial, refusal or revocation did not result from the bidder's inability or failure to comply with any condition relating to grant, maintenance or renewal of such Required Consents applied on a non-discriminatory basis;
d) any judgment or order of any court of competent jurisdiction or statutory authority in India made against the bidder in any proceedings for reasons other than failure of the bidder to comply with Applicable Laws or Required Consents or on account of breach thereof, or of any contract, or enforcement of the Service Level Agreement or exercise of any of its rights under the Service Level Agreement;
e) expropriation or compulsory acquisition by the BMTC or any of their nominated agencies of any material assets or rights of the bidder;
f) unlawful or unauthorized revocation of, or refusal by any authority other than the BMTC to renew or grant any Required Consents required by the bidder to perform its obligations without valid cause, provided that such delay, modification, denial, refusal or revocation did not result from the bidder's inability or failure to comply with any condition relating to grant, maintenance or renewal of such Required Consents applied on a non-discriminatory basis;
g) any requisition of the Project by any other authority; or
h) any requisition of the Project by the BMTC;
i) For the avoidance of doubt, suspension of the Project in accordance with the provisions of the Service Level Agreement shall not be considered a requisition for the purposes of Force Majeure event.
j) For the avoidance of doubt, it is expressly clarified that the failure on the part of the bidder under the Service Level Agreement to implement any disaster contingency planning and back-up and other data safeguards in accordance with the terms of the Service Level Agreement against natural disaster, fire, sabotage or other similar occurrence shall not be deemed to be a Force Majeure event. For the avoidance of doubt, it is further clarified that any negligence in performance of Services which directly causes any breach of security like hacking aren't the forces of nature and hence wouldn't be qualified under the definition of "Force Majeure". In so far as applicable to the performance of Services, the bidder shall be solely responsible to complete the risk assessment and ensure implementation of adequate security hygiene, best practices, processes and technology to prevent any breach of security and any resulting liability therefrom (wherever applicable).

31.2 Meetings with BMTC

As soon as reasonably practicable and in any case within **[**5 (five)**]** days of notification by the Affected Party in accordance with the preceding **Clause** 31.1, the Parties shall along with BMTC and others, meet and hold discussions and where necessary conduct physical inspection and/or survey of the Works to assess the impact and formulate mitigation measures for the Force Majeure Event.

31.3 Performance obligations

31.3.1 If the Affected Party is rendered wholly or partially unable to perform any of its obligations under the Contract because of an event of Force Majeure, it shall be excused from performance of such obligations to the extent it is unable to perform provided that in case the Affected Party is the Bidder, the Bidder shall be entitled to an extension of time.

31.3.2 When the Affected Party is able to resume performance of its obligations under the Contract, it shall give to the other Party written notice to that effect forthwith and shall promptly resume performance of its obligations hereunder.

31.3.3 The Affected Party shall continue to perform such of its obligations which are not affected by the event of Force Majeure and which are capable of being performed in accordance with the Contract.

31.4 Liability for other losses, damages etc.

Save and except as expressly provided in this **Clause** 31 neither Party hereto shall be liable in any manner whatsoever to the other Party in respect of any loss, damage, cost, expense, claims, demands and proceedings relating to or arising out of occurrence or existence of any event of Force Majeure.

31.5 Exceptions to Force Majeure

None of the following events shall be construed to relieve any Party of its obligations hereunder by reason of **Clause** 31:

(i) any changes in market conditions including without limitation changes that affect the supply prices of the Goods;

(ii) commercial impracticability or hardship;

(iii) a Party's lack of funds.

32. DISPUTE RESOLUTION PROCEDURE

32.1 Amicable Resolution and Mediation

32.1.1 Save where expressly stated to the contrary in the Contract, any dispute, difference or

controversy of whatever nature between the Parties, howsoever arising under, out of or in relation to the Contract including disputes, if any, with regard to any acts, decision or opinion of BMTC and so notified in writing by either Party to the other (the "Dispute") shall in the first instance be attempted to be resolved amicably in accordance with the procedure set out in **Clause** 32.1.2 below.

32.1.2 Either Party may require such Dispute to be referred to a person nominated by each Party, for amicable settlement. Upon such reference, the two shall meet at the earliest mutual convenience and in any event within **[**15 (fifteen)**]** days of such reference to discuss and attempt to amicably resolve the Dispute.

32.1.3 In the event that the Dispute in question is not resolved amicably within 15 (fifteen) days of such meeting between the Parties in accordance with **Clause** 32.1.2 either Party may refer the Dispute to arbitration in accordance with **Clause** 32.2.

32.2 Arbitration Procedure

Save where expressly stated to the contrary in the Contract, any Dispute shall be finally settled by binding arbitration under the Arbitration and Conciliation Act 1996 Act and in accordance with the UNICTRAL rules (the "Arbitration Rules") by three arbitrators appointed in accordance with the Arbitration Rules.

32.3 Place of Arbitration

The place of arbitration shall be Bengaluru only.

32.4 English Language

The request for arbitration, the answer to the request, the terms of reference, any written submissions, any orders and awards shall be in English and, if oral hearings take place, English shall be the language to be used in the hearings.

32.5 Enforcement of Award

The Parties agree that the decision or award resulting from arbitration shall be final and binding upon the Parties and shall be enforceable in accordance with the provisions of the Arbitration and Conciliation Act.

32.6 Performance during Arbitration

Pending the submission of and/or decision on a Dispute and until the arbitral award is published, the Parties shall continue to perform their respective obligations under the Contract without prejudice to a final adjustment in accordance with such award.

33. REPRESENTATIONS AND WARRANTIES, DISCLAIMER

33.1 Representations and Warranties of the Bidder

The Bidder represents and warrants to BMTC that:

33.1.1 it is duly organized, validly existing and in good standing under the laws of incorporation of companies in India or in the country of its incorporation;

33.1.2 it has full power and authority to execute, deliver and perform its obligations under the Contract and to carry out the transactions contemplated hereby;

33.1.3 it has taken all necessary corporate and other action under Applicable Laws and its constitutional documents to authorize the Execution, delivery and performance of the Contract;

33.1.4 it has the financial standing and capacity to Execute the Works;

33.1.5 the Contract constitutes its legal, valid and binding obligation enforceable against it in accordance with the terms hereof;

33.1.6 it is subject to the Applicable Laws with respect to the Contract and it hereby expressly and irrevocably waives any immunity in any jurisdiction in respect thereof;

33.1.7 it has complied with all Applicable Laws and has not been subject to any fines, penalties, injunctive relief or any other civil or criminal liabilities which in the aggregate have or may have Material Adverse Effect upon the Works;

33.1.8 no representation or warranty by the Bidder contained herein or in any other document furnished by it to BMTC in relation to Applicable Clearances contains or will contain any untrue statement of material fact or omits or will omit to state a material fact necessary to make such representation or warranty not misleading; and

33.1.9 no bribe or illegal gratification has been paid or will be paid in cash or kind by or on behalf of the Bidder to any person to procure the Contract or any other benefit under the Contract to procure other Contracts in relation to which the Bidder may be a party in relation to the Project.

33.1.10 without prejudice to any express provision contained in the Contract, the Bidder acknowledges that prior to the execution of the Contract, the Bidder has after a complete and careful examination made an independent evaluation of the Project Site, the Technical Conditions of Contract and any information provided by or on behalf of BMTC and has made an inspection of the Project Site and has determined to its satisfaction the nature and extent of risks and hazards as are likely to arise or may be faced by the Bidder in the course of performance of its obligations hereunder.

34. TERMINATION

34.1 Termination

34.1.1 Subject to the other provisions of the Contract, BMTC shall have the right to serve a notice of termination of the Contract on the Bidder and

forthwith terminate the Contract without prejudice to any of its other rights and remedies against the Bidder and without being liable to pay any loss or compensation if:

(i) if any distress or execution is levied upon any of the assets of the Bidder;

(ii) at any time during the currency of the Contract there is a change in the effective control of the Bidder as at the date of the Contract;

(iii) the Bidder fails to complete, test and commission the Bidder's Works/ Project Facility within the Time for Completion or commits any other violation/breach of the terms and conditions of the Contract which is not rectified within **[**14 (fourteen)**]** days of the date of receipt of notice from BMTC in this regard.

(iv) any of the following events occurs:

(a) the passing of a resolution by the shareholders of the Bidder for the winding up of the Bidder;

(b) the appointment of a liquidator in a proceeding for the winding up of the Bidder or the Bidder entering into a compromise with its creditors; or

(c) the making by the court of an order winding up the Bidder,

(d) The Bidder either:

(i) appoints a Sub bidder without the prior approval of BMTC, or terminates any of the Sub bidder; or

(ii) having terminated any of the Subcontracts with the consent of BMTC, appoints a replacement Sub-Bidder without the prior approval of BMTC.

(e) the Bidder without the consent of BMTC assigns or transfers all or any of its rights or obligations under the Contract;

(f) the Bidder repudiates the Contract or otherwise evidences an intention not to be bound by the Contract; or

(g) the expropriation, confiscation, compulsory acquisition of the Project Facility;

(h) if the Bidder or any of its servants or agents commit or suffer to be committed or omit or suffer to be omitted any act, deed, matter or

thing which in the opinion of BMTC whose decision (without an obligation to give reasons therefor) in this regard will be final, is prejudicial to the interests or reputation of BMTC.

(i) the Bidder offers, gives or promises any payment directly or indirectly to any government, political party, or official thereof, or any candidate for political office, or to BMTC in order to influence any substantive decision of, or induce any party or person to use its influence to offset any substantive decision of any Relevant Authority or Statutory Authority or BMTC in regard to any aspect of the Contract;

(j) the Bidder makes any warranty or representation in or in accordance with the Contract which was materially incorrect when made so as to materially affect BMTC interests; or

(k) in the event that the Bidder's liability for Liquidated Damages reaches the cap on such damages as set out in this Annexure and the Completion Certificate for the whole of the Works has not been issued; or

(l) fails to provide, maintain or renew and/or comply with its obligations in relation to the Performance Security; or

(v) the Bidder has, without valid reason and BMTC consent, failed to commence the Works promptly, or fails to progress the Works regularly and/or diligently or

(vi) the Bidder has failed to adhere to the Technical Conditions of Contract and in the reasonable estimation of the BMTC, such failure is likely to mean that Completion of the Works is likely to be delayed beyond the relevant Time for Completion; or

(vii) the Bidder's personnel is/are incompetent, have acted in a manner prejudicial to BMTC best interest or have failed to comply with BMTC health, safety, environment or other rules or regulations and procedures; or

(viii) the Bidder has failed to achieve two Milestones consecutively.

34.2 Termination Procedure

34.2.1 A notice of termination given pursuant to this **Clause** 34 (each a **"**Preliminary Termination Notice**"**) shall specify in reasonable detail the circumstances giving rise to the Preliminary Termination Notice. If, within **[**21 (twenty one)**]** days following the service by BMTC of a Preliminary Termination Notice, the Bidder pays all sums which are due and payable to BMTC or remedies the breach to the satisfaction of BMTC existing as at the date of the Preliminary Termination Notice then such Preliminary

Termination Notice shall be revoked and all existing rights of termination in favour of BMTC under the Contract shall terminate and the Bidder shall continue to perform its obligations under the Contract in a diligent and proper manner.

34.2.2 Within the period of **[**21 (twenty one)**]** days following the receipt of the Preliminary Termination Notice by the Bidder and unless the Parties shall have otherwise agreed or the circumstances giving rise to the Preliminary Termination Notice shall have ceased to exist or shall have not been remedied, BMTC may terminate the Contract by giving written notice (a **"**Termination Notice**"**) to the Bidder and the Contract shall terminate on the date mentioned in the Termination Notice (**"**Termination Date**"**).

34.2.3 The termination of the Contract by BMTC for reasons other than breach can be made by a written notice to the Bidder and nothing herein will obligate BMTC to terminate the Contract or be liable for any exercising its right of termination and BMTC may pursue all remedies available in law instead of termination.

34.3 Upon Termination

34.3.1 Upon Termination for any reason whatsoever, the Bidder shall to the extent instructed by the BMTC:

(i) cease all further work as instructed by the BMTC in the Termination Notice and the Bidder shall carry out works for the sole purpose of securing, preserving and protecting that part of the Works already Executed and any work required to leave the Project Site and the Works in a clean and safe condition;

(ii) repatriate the Bidder's and Sub bidders personnel from any part of the Project Site and the Works;

(iii) deliver to BMTC the Works Executed by the Bidder as at the Termination Date;

(iv) ensure that it and those it is contractually or otherwise responsible for, vacate the Project Site;

(v) promptly and in an orderly manner deliver to BMTC all documents relating to the Works which are for the time being under the control of the Bidder;

34.3.2 Without prejudice to **Clause** 34.3.1 upon Termination:

(i) BMTC may enter the Project Site and the Works thereof and expel the Bidder therefrom and BMTC may complete the Works itself or by employing any third party;

(ii) BMTC may, to the exclusion of any right of the Bidder over the same, take over and have free use, without payment to the Bidder, of any Bidder's Equipment and temporary works of which have been delivered to the Project Site for such period as the BMTC considers necessary for the Execution of the Works, without being responsible to the Bidder for fair wear and tear thereof and to the exclusion of any right of the Bidder over the same.

(iii) BMTC may at any time sell any of the said Bidder's Equipment, temporary works and any unused materials and apply the proceeds of sale in or towards for satisfaction of any sums due or which may become due to it from the Bidder under the Contract; and

(iv) BMTC shall have the power and authority to prohibit the Bidder and any person claiming through or under the Bidder from entering the Project Site.

34.3.3 Depending on the event of default, Performance Guarantee furnished by bidder may be forfeited and any payment due to the bidder may be withheld for deduction of any applicable penalties and / or calculated liquidated damages to the BMTC due to default on the part of the bidder.

34.3.4 In the event that BMTC terminates the contract which is not due to default on the part of the bidder, the compensation shall be decided by BMTC and mutually agreed as below: -

(i) If the contract is terminated at the Implementation Phase (on or before Go-Live / commissioning), bidder shall be asked to remove any temporary works and tools etc. which are not part of the project deliverable and BMTC shall not pay anything additional to what has been paid already / due to be paid for the completed works, subject to adjustment of any liquidated damages, penalty charges as per Service Level Agreement or charges for non-compliances or any kind of loss to BMTC. Any payment already made by the BMTC for which the services / products are not provided / delivered / returned, the sum shall be recovered from the Performance Bank Guarantee and / or BMTC shall ask the bidder to refund any such payment promptly, no later than **[**21 (twenty-one)**]** days following the receipt of the notice from the BMTC in this regard.

(ii) If the contract is terminated post Commissioning of the project (in O&M Phase), the BMTC shall ask the bidder to leave all the hardware, equipment and software applications etc. as per terms defined in this tender document. Bidder shall be required to adhere to the same. The bidder shall be paid on pro-rate basis for the respective period for which payment is due, subject to adjustment of any liquidated damages, penalty charges as per Service Level Agreement or charges for non-compliances or any kind of loss to BMTC.

34.3.5 BMTC, on receipt of a written application for reimbursement, on approval if deemed appropriate, agrees to pay bidder for

(i) All charges for Services bidder provides during Exit Management at actuals and any Deliverables and/or system (or part thereof) bidder delivers during

Exit Management, and

(ii) Reimbursable expenses bidder incurs during Exit Management at actuals. If BMTC terminates without cause, BMTC also agrees to pay any applicable adjustment expenses bidder incurs as a result of such termination (which bidder shall take reasonable steps to mitigate). The reimbursement shall be made for only those expenses for which original bill is produced, and only for the expense incurred by bidder and shall be paid at actuals. BMTC shall not pay any kind of interest.

34.3.6 BMTC shall not be liable to pay any compensation in case of cancellation of Contract.

34.3.7 Upon the expiration or termination of the contract for any reason, the provisions of the agreement clauses like CONFIDENTIALITY, LIABILITY AND INDEMNITY, and GOVERNING LAW AND JURISDICTION, DISPUTE RESOLUTION PROCEDURE will survive indefinitely.

34.4 Termination of the Service Level Agreement due to bankruptcy of bidder:

In addition to all other rights or remedies provided for in Service Level Agreement or by law, BMTC may terminate the Service Level Agreement in whole, but not in part, in the event that:

a) The other Party makes a composition with or assignment for the benefit of creditors;
b) The other Party becomes or is unable to pay debts as they fall due;
c) A trustee, liquidator, administrator or receiver (including an administrative receiver) or similar official is appointed with respect to the other Party or any substantial part of such Party's assets;
d) Any action is taken by or against the other Party under any bankruptcy or insolvency laws or laws relating to the relief of debtors; or
e) The other Party is the subject of a winding-up petition which is not dismissed within five business days, or a resolution is passed for its winding-up.

35. MISCELLANEOUS

35.1 Assignment and Charges

35.1.1 Subject to **Clause**s 35.1, neither Party shall assign the Contract or the rights, benefits and obligations hereunder save and except with prior consent of the other Party.

35.1.2 The Bidder shall not create nor permit to subsist any Encumbrance over or otherwise transfer or dispose of all or any of its rights and benefits under the Contract except with prior consent in writing of BMTC, which consent shall not be unreasonably withheld.

35.2 Interest

Any sum which becomes payable under any of the provisions of the Contract by one Party to the other Party shall, if the same be not paid within the time allowed for payment thereof, shall be deemed to be a debt owed by the Party responsible for payment thereof to the Party entitled to receive the same. Such sum shall until payment thereof carry the Default Interest Rate from the due date for payment thereof until the same is paid to or otherwise realized by the Party entitled to the same.

35.3 Governing Law and Jurisdiction

The Contract shall be governed by the laws of India. In respect of all matters arising out of or relating to the Contract, the Courts at Bengaluru, India shall have the jurisdiction to decide the matter.

35.4 Waiver

35.4.1 Waiver by either Party of any default by the other Party in the observance and performance of any provision of or obligations under the Contract:

(i) shall not operate or be construed as a waiver of any other or subsequent default hereof or of other provisions or obligations under the Contract;
(ii) shall not be effective unless it is in writing and executed by a duly authorized representative of such Party; and
(iii) shall not affect the validity or enforceability of the Contract in any manner.

35.4.2 Neither the failure by either Party to insist on any occasion upon the performance of the terms, conditions and provisions of the Contract or any obligation hereunder nor time or other indulgence granted by a Party to the other Party shall be treated or deemed as waiver/breach of any terms, conditions or provisions of the Contract.

35.5 Survival

Termination or expiry of the Contract (i) shall not relieve the Bidder of any obligations already incurred hereunder which expressly or by implication survives termination hereof, and (ii) except as otherwise provided in any provision of the Contract expressly limiting the liability of either Party, shall not relieve either Party of any obligations or liabilities for loss or damage to the other Party arising out of or caused by acts or omissions of such Party prior to the effectiveness of such termination or arising out of such termination.

35.6 Amendmets

The Contract constitutes a complete and exclusive understanding of the terms of the

Contract between the Parties on the subject hereof and no amendment or modification hereto shall be valid and effective unless agreed to by all the Parties hereto and evidenced in writing.

35.7 Severability

If for any reason whatsoever any provision of the Contract is or becomes invalid, illegal or unenforceable or is declared by any court of competent jurisdiction or any other instrumentality to be invalid, illegal or unenforceable, the validity, legality or enforceability of the remaining provisions shall not be affected in any manner, and the Parties shall negotiate in good faith with a view to agreeing upon one or more provisions which may be substituted for such invalid, unenforceable or illegal provisions, as nearly as is practicable. Provided failure to agree upon any such provisions shall not be subject to dispute resolution under this Contract or otherwise.

No failure to exercise or enforce and no delay in exercising or enforcing on the part of either Party to the Service Level Agreement of any right, remedy or provision of the Service Level Agreement shall operate as a waiver of such right, remedy or provision in any future application nor shall any single or partial exercise or enforcement of any right, remedy or provision preclude any other or further exercise or enforcement of such right, remedy or provision or the exercise or enforcement of any other right, remedy or provision.

35.8 No Partnership

Nothing contained in the Contract shall be construed or interpreted as constituting a partnership between the Parties. Neither Party shall have any authority to bind the other in any manner whatsoever. The Contract shall be construed to have been entered on a principal to principal basis.

35.9 Entire Agreement

The Contract constitutes the entire agreement between the Parties and supersedes all prior negotiations, commitments, representations, communications and agreements relating to the Contract either oral or in writing except to the extent they are expressly incorporated herein. The Bidder confirms that it has not relied upon any representation inducing it to enter into the Contract (whether or not such representation has been incorporated as a term of the Contract) and agrees to waive any right which it might otherwise have to bring any action in respect of such representation. The Bidder further confirms that there is not in existence at the date of the Contract any collateral contract or warranty of which the Bidder is the beneficiary which might impose upon BMTC obligations which are in addition to or vary the obligations expressly contained in the Contract and which relate in any way to the subject matter of the Contract. The Bidder's only rights arising out of, or in connection with, any act, matter or thing said, written or done, or omitted to be said, written or done, by or on behalf of BMTC (or any agent, employee or sub bidder of BMTC in negotiations leading up to the Contract or in the performance or purported performance of the

Contract or otherwise in relation to the Contract are the rights to enforce the express obligations of BMTC contained in the Contract and to bring an action for breach thereof. Nothing in this **Clause** 35.9 is intended to exclude liability of the Bidder for fraud or fraudulent misrepresentation.

35.10 Liability and Indemnity

35.10.1 The Bidder shall indemnify, defend and hold BMTC harmless against any and all proceedings, actions and third party claims arising out of a breach or omission or non- performance by the Bidder of any of its obligations under the Contract except to the extent that any such claim has arisen due to breach by BMTC of any of its obligations under the Contract.

35.10.2 In the event that either Party receives a claim from a third party in respect of which it is entitled to the benefit of an indemnity under the Contract (the "Indemnified Party") it shall notify the other Party ("Indemnifying Party") within **[**7 (seven)**]** days of receipt of the claim and shall not settle or pay the claim without the prior approval of the Indemnifying Party, provided that, such approval shall not be unreasonably withheld or delayed. In the event that the Indemnifying Party wishes to contest or dispute the claim it may conduct the proceedings in the name of the Indemnified Party subject to the Indemnified Party being secured against any costs involved to its reasonable satisfaction.

35.10.3 The Indemnified Party shall have the right, but not the obligation, to contest, defend and litigate any claim, action, suit or proceeding by any third party alleged or asserted against such party in respect of, resulting from, related to or arising out of any matter for which it is entitled to be indemnified hereunder and their reasonable costs and expenses shall be indemnified by the Indemnifying Party. If the Indemnifying Party acknowledges in writing its obligation to indemnify the person indemnified in respect of loss to the full extent provided by this **Clause** 35.10, the Indemnifying Party shall be entitled, at its option, to assume and control the defence of such claim, action, suit or other proceedings, liabilities, payments and obligations at its expense and through counsel of its choice provided it gives prompt notice of its intention to do so to the Indemnified Party and reimburses the Indemnified Party for the reasonable cost and expenses incurred by the Indemnified Party prior to the assumption by the Indemnifying Party of such defence. The Indemnifying Party shall not be entitled to settle or compromise any claim, action, suit or proceeding without the prior written consent of the Indemnified Party unless the Indemnifying Party provides such security to the Indemnified Party as shall be reasonably required by the Indemnified Party to secure, the loss to be indemnified hereunder to the extent so compromised or settled.

The limitation described above will not apply to (i) Bidder's obligations under Confidentiality or Infringement Indemnity (ii) BMTC's obligations

under Confidentiality or Infringement Indemnity or (iii) BMTC's non-performance of its payment obligations for Services provided or for termination or related charges pursuant to Service Level Agreement.

Form a) Letter for Submission of Technical Proposal

[To be executed on the Letter Head of the Bidder]

(To be scanned and uploaded)

[*Location, Date*]

To: BMTC

……

……

Dear Sir,

We, the undersigned, offer our bid in response to your Tender No…….. dated .....We are hereby uploading our Bid, which includes this Technical Bid and a Financial Bid. Our Bid is valid for a period of 120 days from the last date of Submission of Bids, extendable for additional 60 days, on request by BMTC without any additional cost.

We hereby declare that all the information and statements made in this Bid is true and complete in all respects and is as per the guidelines laid down in the tender document. We further understand that any information which is found false or is not as per the guidelines and terms& conditions of the tender document may lead to our disqualification.

We hereby declare that our Technical Bid contains Earnest Money Deposit of Indian Rupees _____/- Only (Rs. _____ Only).

We undertake that if our Bid is accepted, we will be committed to execute & complete the scope of work as per the agreed terms and conditions.

If negotiations are held during the period of validity of the Bid, we undertake that our Bid will be binding upon us and will be subject to the modifications resulting from Contract negotiations. However, the Bid validity continues to be 120 days & is extendable for additional 60 days, on request by BMTC, without any additional cost.

We understand that BMTC are not bound to accept any Proposal that it receives from us.

Yours sincerely,

Authorized Signature [*In full*]:

Authorized Signature [*In initials*]:

Name and Title of Signatory: _____

Name of Firm: _____

Address:_____.

[Note 1: Authorized person signing shall attach to this document a proof of authorization for signing on behalf of the Bidder Company

Note 2: To be signed in blue ink]

Form b) Letter of Undertaking

[On the letterhead of the Bidder]
(To be scanned and uploaded)

LETTER OF UNDERTAKING

Date: _____

To: BMTC
……..
……..

Re: Tender No. ……

We acknowledge that the documents for Tender No..... issued to us are confidential and we hereby undertake and agree as follows:

1. "**Confidential Information**" means the Tender documents and everything contained therein, all documentation, data, particulars of the works and technical or commercial information made by (or on behalf of) BMTC or obtained directly or indirectly from BMTC or its representatives by us or which is generated by us or any information or data that we receive or have access to, as a result of the Tender, as being confidential information of BMTC, provided that such term does not include information that (a) was publicly known or otherwise known to us prior to the time of such disclosure, (b) subsequently becomes publicly known through no act or omission by us or any person acting on our behalf.

2. We shall maintain the confidentiality of Confidential Information in accordance with procedures adopted by us in good faith to protect confidential information of third parties delivered to us, provided that we may deliver or disclose Confidential Information to our authorized representatives who agree to hold confidential the Confidential Information substantially in accordance with the terms of this Undertaking.

3. We shall not at any time whatsoever:

   i Disclose, in whole or in part, any Confidential Information received directly or indirectly from the BMTC to any third party.

   ii Reproduce, publish, transmit, translate, modify, compile or otherwise transfer the Confidential Information.

4. In case our bid is not accepted and immediately upon the acceptance of the bid of any of the other Bidder, we shall:

   i Return all Confidential Information including without limitation, all originals, copies, reproductions and summaries of Confidential Information; and

   ii Destroy all copies of Confidential Information in our possession, power or control, which are present on magnetic media, optical disk or other storage device, in a manner that ensures that the Confidential Information is rendered unrecoverable.

5. We shall certify to BMTC that we have returned or destroyed such Confidential Information to BMTC within two (2) days of such a request being made by BMTC.

Name of Bidder **Signature of Authorized Representative**

Form c) DELETED

Form d) A: Format for Power of Attorney to appoint and authorized Attorney

(To be submitted on a Stamp Paper of relevant value)

Power of Attorney

Know all men by these presents, we _____ _____ (name and address of the registered office) do hereby constitute, appoint and authorize Mr. / Ms. _____(name and residential address) who is presently employed with us and holding the position of _____ as our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our bid for the Project envisaging "**Supply, Installation & Commissioning of Inspection Equipment at Automated Vehicle Fitness Testing Station (ATS) at Jadigenahalli (Bengaluru) in Karnataka State**", (the "Project") including signing and submission of all documents and providing information / responses to Bangalore Metropolitan Transport Corporation, (BMTC) representing us in all matters before BMTC, and generally dealing with BMTC in all matters in connection with our bid for the said Project.

We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

For _____

(Signature)

(Name, Title and Address)

Accepted

(Signature)

(Name, Title and Address of the Attorney)

Note:

- The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.
- In case the Application is signed by a Partner / authorised Director of the Applicant, a certified copy of the appropriate resolution / document conveying such authority may be enclosed in lieu of the Power of Attorney.

Form d) B: Format for Power of Attorney to authorize Lead Member of Consortium

(To be submitted on a Stamp Paper of relevant value)

Power of Attorney

Whereas the Bangalore Metropolitan Transport Corporation, (BMTC) has invited applications from eligible bidders for "**Supply, Installation & Commissioning of Inspection Equipment at Automated Vehicle Fitness Testing Station (ATS) at Jadigenahalli (Bengaluru) in Karnataka State**", (the "Project")

Whereas, _____ and _____ (collectively the "Consortium") being Members of the Consortium are interested in bidding for the Project in accordance with the terms and conditions of the Tender Document and other connected documents in respect of the Project,

AND

Whereas, it is necessary for the Members of the Consortium to designate one of them as the Lead Member with all necessary power and authority to do for and on behalf of the Consortium, all acts, deeds and things as may be necessary in connection with the Consortium's bid for the Project and its execution.

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS

We, M/s. _____ having our registered office at _____,

And M/s._____ having our registered office at _____,
(Hereinafter collectively referred to as the "Principals") do hereby irrevocably designate, nominate, constitute, appoint and authorize M/s. _____ having its registered office at _____ _____,

being one of the Members of the Consortium, as the **Lead Bidder** and true and lawful attorney of the Consortium (hereinafter referred to as the "Attorney").

We hereby irrevocably authorize the Attorney (with power to sub-delegate) to conduct all business for and on behalf of the Consortium and any one of us during the bidding process and, in the event the Consortium is awarded the contract, during the execution of the Project and in this regard, to do on our behalf and on behalf of the Consortium, all or any of such acts, deeds or things as are necessary or required or incidental to the pre-qualification of the Consortium and submission of its bid for the Project, including but not limited to signing and submission of all applications, bids and other documents and writings, participate in bidders and other conferences, respond to queries, submit information / documents, sign and execute contracts and undertakings consequent to acceptance of the bid of the Consortium and generally to represent the Consortium in all its dealings with the BMTC, and / or any other Government Agency or any person, in all matters in connection with or relating to or arising out of the Consortium's bid for the Project and / or upon award thereof till the Master Service Agreement is entered into with the BMTC.

AND

hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us / Consortium.

IN WITNESS WHEREOF WE THE PRINCIPALS ABOVE NAMED HAVE EXECUTEDTHIS POWER OF

ATTORNEY ON THIS _____ DAY OF _____, 20_____.

For _____
(Signature)
Name & Title _____

For _____
(Signature)
Name & Title _____

Witnesses:
1.
2.

_____
(Executants)
(To be executed by all the Members of the Consortium)

Notes:

1. The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, lay down by the applicable law and the charter documents of the executants(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.

2. Also, wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders' resolution/ power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder

Form e) Performance Bank Guarantee

Proforma for Performance Bank Guarantee

(To be scanned and uploaded)

(To be executed on non-Judicial stamped paper of an appropriate value)

WHEREAS BMTC having its office at..... (address) - (hereinafter referred to as "**The Owner**" which expression shall unless repugnant to the context includes their legal representatives, successors and assigns), has executed a contract on [*Please insert date of execution of Contract*] ("**Contract**") with [*insert name of the Successful Bidder*]..... (hereinafter referred to as the "**Contractor**" which expression shall unless repugnant to the context include its legal representatives, successors and permitted assigns) for the performance, execution and implementation of the Works ("**Works**" shall have the meaning ascribed to it in the Contract] based on the terms & conditions set out in the Tender Documents number [*insert reference number of the Tender Documents*] dated [*insert date of issue of Tender Documents*]..... and various other documents forming part thereof.

AND WHEREAS one of the conditions of the Contract is that the Contractor shall furnish to the Owner a Bank Guarantee from a Nationalized bank in India having a branch at Bengaluru for an amount equal to Rs. 30,00,000 /- (Rs. Thirty Lakhs only) of the total Contract Sum (the amount guaranteed under this bank guarantee shall hereinafter be referred to as the "**Guaranteed Amount**") against due and faithful performance of the Contract from the post-commissioning stage of the Works under the Contract, including the performance bank guarantee obligation and other obligations of the Contractor for the supplies made and the Works being performed and executed by under the Contract. This bank guarantee shall be valid upto _____[insert a date which is 6 years and 6 months from the date of signing of contract] from the date hereof up to the expiry of the Warranty Period and AMC period and six months thereafter.

AND WHEREAS the Contractor has approached [*insert the name of the scheduled bank*] (hereinafter referred to as the "**Bank**") having its registered office at [*insert the address*] …… and at the request of the Contractor and in consideration of the promises made by the Contractor, the Bank has agreed to give such guarantee as hereunder: -

(i) The Bank hereby undertakes to pay under this guarantee, the Guaranteed Amount claimed by the Owner without any further proof or conditions and without demur, reservation, contest, recourse or protest and without any enquiry or notification to the Contractor merely on a demand in the form set out in Appendix I ("**Demand**") from the Owner stating that the amount claimed is due to the Owner under the Contract. Any such demand made on the Bank by the Owner shall be conclusive as regards the amount due and payable by the Bank under this bank guarantee and the Bank shall pay without any deductions or set-offs or counterclaims whatsoever, the total sum claimed by the Owner in such Demand. The Owner shall have the right to make an unlimited number of Demands under this bank guarantee provided that the aggregate of all sums paid to the Owner by the Bank under this bank guarantee shall not exceed the Guaranteed Amount.

(ii) However, the Bank's liability under this bank guarantee shall be restricted to an amount not exceeding [*figure of Guaranteed Amount to be inserted here*] ….....only).

(iii) The Owner will have the full liberty without reference to the Bank and without affecting the bank guarantee to postpone for any time or from time to time the exercise of any powers and rights conferred on the Owner under the Contract and to enforce or to forbear endorsing any powers or rights or by reasons of time being given to the Contractor which under law relating the Surety would but for the provisions have the effect of releasing the surety.

(iv) The rights of the Owner to recover the Guaranteed Amount from the Bank in the manner aforesaid will not be affected or suspended by reasons of the fact that any dispute or disputes have been raised by the Contractor and / or that any dispute(s) are pending before any office, tribunal or court in respect of such Guaranteed Amount and/ or the Contract.

(v) The guarantee herein contained shall not be affected by the liquidation or winding up, dissolution, change of constitution or insolvency of the Contractor but shall in all respects and for all purposes be binding and operative until payment of all money due to the Owner in respect of such liability or liabilities is effected.

(vi) This bank guarantee shall be governed by and construed in accordance with the laws of the Republic of India and the parties to this bank guarantee hereby submit to the jurisdiction of the Courts of Bengaluru for the purposes of settling any disputes or differences which may arise out of or in connection with this bank guarantee and for the purposes of enforcement under this bank guarantee.

(vii) All capitalized words used but not defined herein shall have the meanings assigned to them under the Contract.

NOTWITHSTANDING anything stated above, the liability of the Bank under this bank guarantee is restricted to the Guaranteed Amount and this bank guarantee shall expire on the expiry of the Warranty Period under the Contract. Unless a Demand under this bank guarantee is filed against the Bank within six (6) months from the date of expiry of this bank guarantee all the rights of the Owner under this bank guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities hereunder. However, if the Contractor's obligations against which this bank guarantee is given, are not completed or fully performed by the Contractor within the period prescribed under the Contract, the Bank hereby agrees to further extend the bank guarantee for further periods of six months each till the Contractor fulfills its obligations under the Contract.

We have the power to issue this bank guarantee in your favour under Memorandum and Article of Association and the Undersigned has full power to do so under the Power of Attorney dated [*date of power of attorney to be inserted*]..... granted to him by the Bank.

Date:

Bank

Corporate Seal of the Bank

By its constituted Attorney Signature of a person duly authorized to sign on behalf of the Bank.

APPENDIX 1

Form of Demand

[To the

issuing

Bank]

Dear Sir/s,

The Contract between BMTC and [*Please insert the name of the Successful Bidder*] Bank Guarantee No. ***** ("the Bank Guarantee").

We refer to the above Contract and Bank Guarantee. Terms defined in the Bank Guarantee shall have the same meaning when used herein.

In accordance with the terms of the Bank Guarantee, we require payment by you of the sum of Rs. [*****] (*** Rupees) to the following account:

Account Number: [ ] with [ ] Bank, [ ] Branch, Sort Code [ ].

Yours sincerely,

[Signed by
[ ]
for and on behalf of
BMTC Government of Karnataka

Form f) Deviations Suggested

(To be scanned and uploaded)

[The Bidder must present and justify here any modification or improvement to the Conditions of Contract proposed to in the interest of BMTC. Such suggestions should be concise and to the point. In case, the Bidder does not want to suggest any deviation, this section must contain a statement indicating "No Deviation Suggested"]

[The Bidder shall use the following template in order to explain the deviations, and fill and include in the current document as many templates as deviations appear in his offer. The Bidder shall be required to furnish a separate sheet as per the following template for each deviation suggested.]

Subject	**Minimum Requirement appearing on the Equipment Details**
	[Please copy the requirement on the Equipment Details]
Proposed Specification	
[Explain in detail what alternative solution are you proposing]	
Reasons for the proposed solution to be superior than initial requirement	
[Give clear reasons why you think the proposed solution is better than the Requirement expressed in TCC and Checklist]	

Form g) Detailed Technical Specifications

(To be scanned and uploaded)

[The Bidder is requested to fill each chapter of the following form with the detailed description of the proposed equipment. If required, Bidder may also provide drawings/graphical representations along with this form. The structure of this document is according to the TCC, and the Bidder shall maintain the same structure].

Automated Vehicle Fitness Testing Station (ATS)

1. FUNCTIONAL REQUIREMENTS

1.1 General Purpose of the inspection lane

[Please fill, giving details about how the Bidder is responding to all requirements]

1.2 Tests to be Performed

[Please fill]

1.3 Test configuration

1.3.1. ***Inspection sequence***

[Please fill]

1.4 IT Platform

[Please fill]

2. TECHNICAL DESCRIPTION

2.1 Technical specifications

[Please fill]

2.2 Common Equipment

[Please fill]

2.2.1. ***Air Compressor***

[Please fill]

2.2.2. ***Free Roller Set***

[Please fill]

2.2.3. ***Bogie Roller Set***

[Please fill]

2.2.4. ***Towing Trolley or Rail Trolley (for front wheel of 3-Wheeled vehicle)***

[Please fill]

2.2.5. ***Calibration Equipment***

[Please fill]

2.2.6. *Automatic Tyre Pressure Filler and Indicator*

[Please fill]

Sr. No.	Specifications	Minimum Requirements	Bidders Specifications
1	Resolution	+/- 0.1 bar	
2	Accuracy	± 0.5 % of Full Scale or better	
3	Full scale	at least 10.6 bar	

2.3 Inspection Lane LCV

[Please fill]

2.3.1. *Roller Brake Tester*

[Please fill]

Sr. No.	Specifications	Minimum Requirements	Bidders Specifications
1	Maximum load per axle	Bidder to specify	
2	Maximum measurable brake load	at least of 6kN	
3	Difference in left & right braking efficiency	Bidder to specify	
4	Brake load resolution	<= 100N	
5	Testing speed	5 km/h ± 1 km/h	
6	Minimum Tracking width	Bidder to specify	
7	Maximum Tracking width	Bidder to specify	
8	Roller diameter	Bidder to specify	
9	Roller axle separation	Bidder to specify	
10	Roller surface - Minimum frictional coefficient	0.6	
11	Roller surface - Service life	minimum 25000 hrs	
12	Measurement accuracy	within ± 100 N	
13	Provision for either lifting or braking of roller for easy exit of vehicle	To be provided	

2.3.2. *Axle Weight Measurement*

[Please fill]

Sr. No.	Specifications	Minimum Requirements	Bidders Specifications
1	Measuring range	0 –3000 kg	
2	Resolution	5 kg	
3	Accuracy	± 1% of reading	

2.3.3. *Suspension Tester*

[Please fill]

Sr. No.	Specifications	Minimum Requirements	Bidders Specifications
1	Maximum load per axle	Bidder to specify	
2	Amplitude of excitation	6.5 mm +/- 5 mm	
3	Minimum Tracking width	Bidder to specify	
4	Maximum Tracking width	Bidder to specify	
5	Measurement accuracy	± 1% of wheel load	

2.3.4. *Side Slip Tester*

[Please fill]

Sr. No.	Specifications	Minimum Requirements	Bidders Specifications
1	Maximum load per axle	Bidder to specify	
2	Length of the Track Plate	Bidder to specify	
3	Width of the Track Plate	Bidder to specify	
4	Height of the Track Plate	Bidder to specify	
5	Measuring range	± 20 m/km	
6	Measuring resolution	1 m/km	
7	Accuracy	±1.0 m/km	

2.3.5. *Joint Play Tester*

[Please fill]

Sr. No.	Specifications	Minimum Requirements	Bidders Specifications
1	Maximum load capacity per axle	Bidder to specify	
2	Maximum Force per plate	at least 6 kN	
3	Maximum movement on each side	50 – 80 mm (Hydraulic)	
4	Length of the Test Plate	Bidder to specify	
5	Width of the Test Plate	Bidder to specify	

2.3.6. *Electronic Steering Gear Play Detector*

[Please fill]

Sr. No.	Specifications	Minimum Requirements	Bidders Specifications
1	Capable of measuring angular movement up to	± 30°	
2	Recording mechanism to measure wheel movement against steering movement	Bidder to comply	
3	Measurement accuracy	± 2% of full-scale deflection	

2.3.7. *Semi-Automatic Headlight Tester*

[Please fill]

Sr. No.	Specifications	Minimum Requirements	Bidders Specifications
1	Light Intensity range measure (min)	0-100,000 cd	
2	Illumination Intensity range measure	0-200 lux	
3	Headlight tester must have ability to autofocus and should be capable of measuring headlamp with their Centres above ground level	500 mm to 1200 mm	
4	Vertical and horizontal measuring range	±50 cm/10 m (±5 %)	

5	Maximum deviation of intensity	±5% of reading	
6	Maximum deviation of Inclination measurement (vertical orientation)	± 0.1%	
7	Type of Head light tester	Semi-automatic	
8	Measurement (low beam pattern) and data transfer	without human intervention	

2.3.8. *Smoke Meter (Opacimeter)*

[Please fill]

Copy of Type Approval & COP Certificate needs to be attached.

2.3.9. *Exhaust Gas Analyzer*

[Please fill]

Copy of Type Approval & COP Certificate needs to be attached.

2.3.10. *Speedometer Tester / Speed Governor Tester*

[Please fill]

Sr. No.	Specifications	Minimum Requirements	Bidders Specifications
1	Maximum load capacity per axle	Bidder to specify	
2	Minimum Track width	Bidder to specify	
3	Maximum Track width	Bidder to specify	
4	Minimum Roller diameter	Bidder to specify	
5	Minimum Roller axle separation	Bidder to specify	
6	Measuring range	20 – 160 km/h	
7	Resolution	1 km/h	
8	Accuracy	± 1 % of indicated reading	
9	Provision for lifting and braking of roller for easy exit of vehicle	To be provided	

2.3.11. *Sound Level Meter*

[Please fill]

Sr. No.	Specifications	Minimum Requirements	Bidders Specifications

1	Recommended as per	IEC 60651/ IEC 61672-1	
2	Measuring range	≥30dB to ≤120dB	
3	Frequency	A & C	
4	Accuracy	± 1.5 dB	
5	Mounting	Tripod stand mounted	
6	Power	Build battery for power source of charging from outlet of 220V AC & USB	
7	Resolution	0.1 dB	

2.3.12. *OBD Scan Tool*

[Please fill]

Sr. No.	Specifications	Bidders Specifications
1	Compliant to: OBDII/EOBD/HD-OBD/WWH-OBD Scan-Tool in accordance with SAE J1979, SAE J1939 and ISO 27145	
2	Must support all OBD modes	
3	Diagnostics Communication mediums Supported KWP2000 (K-Line, CAN TP2.0 and ISO-CAN), UDS (ISO-CAN)	

2.3.13 *Test Fingers*

[Please fill]

Sr. No.	Specifications	Bidders Specifications
1	IP XXB & IP XXD test fingers	

2.3.14 *Insulation Tester*

[Please fill]

Sr. No.	Specifications	Minimum Requirements	Bidders Specifications
1	Rated measuring voltage	upto 1000V DC/AC (45 to 65 Hz)	
2	Measuring range	10kΩ to 100MΩ or better	

3	Accuracy	upto 10MΩ ±2% of reading & above 10MΩ ±5% of reading	

2.4 Inspection Lane HCV

2.4.1. ***Roller Brake Tester***

[Please fill]

Sr. No.	Specifications	Minimum Requirements	Bidders Specifications
1	Maximum load charge per axle	Bidder to specify	
2	Maximum measurable brake load	at least 40 kN	
3	Difference in left & right braking efficiency	Bidder to specify	
4	Roller Diameter	Bidder to specify	
5	Roller Separation	Bidder to specify	
6	Roller Length	Bidder to specify	
7	Roller Surface - Minimum frictional coefficient	0.6	
8	Roller Surface - Service life	minimum 25000 hrs	
9	Brake load resolution	≤ 100N	
10	Testing speed	minimum 2.5 km/h	
11	Measurement accuracy	within ± 2% of measured value	
12	Provision for lifting and braking of roller for easy exit of vehicle	To be provided	

2.4.2. ***Axle Weight Measurement***

[Please fill]

Sr. No.	Specifications	Minimum Requirements	Bidders Specifications
1	Measuring range	0 kg –15000 kg	
2	Resolution	5 kg	
3	Accuracy	± 1% of reading	

2.4.3. ***Side Slip Tester***

[Please fill]

Sr. No.	Specifications	Minimum Requirements	Bidders Specifications
1	Maximum load per axle	Bidder to specify	

2	Measuring range	± 20 m/km	
3	Measuring resolution	1 m/km	
4	Accuracy	±1.0m/km	
5	Track Plate Length	Bidder to specify	
6	Track Plate Width	Bidder to specify	
7	Track Plate Height	Bidder to specify	

2.4.4. ***Joint Play Tester***

[Please fill]

Sr. No.	Specifications	Minimum Requirements	Bidders Specifications
1	Maximum load capacity per axle	Bidder to specify	
2	Maximum Force per plate	at least 30 kN	
3	Maximum movement on each side	100 mm (Hydraulic)	
4	Length of the Test Plate	Bidder to specify	
5	Width of the Test Plate	Bidder to specify	

2.4.5. ***Electronic Steering Gear Play Detector***

[Please fill]

Sr. No.	Specifications	Minimum Requirements	Bidders Specifications
1	Capable of measuring angular movement up to	± 30°	
2	Recording mechanism to measure wheel movement against steering movement	Bidder to comply	
3	Measurement accuracy	± 2% of full-scale deflection	

2.4.6. ***Semi-Automatic Headlight Tester***

[Please fill]

Sr. No.	Specifications	Minimum Requirements	Bidders Specifications
1	Light Intensity range measure (min)	0-100,000 cd	

2	Illumination Intensity range measure	0-200 lux	
3	Headlight tester must have ability to autofocus and should be capable of measuring headlamp with their Centres above ground level	500 mm to 1200 mm	
4	Vertical and horizontal measuring range	±50 cm/10 m (±5 %)	
5	Maximum deviation of intensity	±5% of reading	
6	Maximum deviation of Inclination measurement (vertical orientation)	± 0.1%	
7	Type of Head light tester	Semi-automatic	
8	Measurement (low beam pattern) and data transfer	without human intervention	

2.4.7. *Smoke Meter (Opacimeter)*

[Please fill]

Copy of Type Approval & COP Certificate needs to be attached.

2.3.8. Exhaust Gas Analyzer

[Please fill]

Copy of Type Approval & COP Certificate needs to be attached.

2.4.9. *Speedometer Tester / Speed Governor Tester*

[Please fill]

Sr. No.	Specifications	Minimum Requirements	Bidders Specifications
1	Maximum load capacity per axle	Bidder to specify	
2	Measuring range	25 – 100 km/h	
3	Resolution	1 km/h	
4	Accuracy	± 1 % of indicated reading	
5	Roller Diameter	Bidder to specify	
6	Roller axle separation	Bidder to specify	
7	Minimum Track width	Bidder to specify	
8	Maximum Track width	Bidder to specify	
9	Provision for lifting and braking of roller for easy exit of vehicle	To be provided	

2.4.10. ***Sound Level Meter***

[Please fill]

Sr. No.	Specifications	Minimum Requirements	Bidders Specifications
1	Recommended as per	IEC 60651/ IEC 61672-1	
2	Measuring range	≤ 30dB to ≥120dB	
3	Frequency	A & C	
4	Accuracy	± 1.5 dB	
5	Mounting	Tripod stand mounted	
6	Power	Build battery for power source of charging from outlet of 220V AC & USB	
7	Resolution	0.1 dB	

2.4.11. ***OBD Scan Tool***

[Please fill]

Sr. No.	Specifications	Bidders Specifications
1	Compliant to: OBDII/EOBD/HD-OBD/WWH-OBD Scan-Tool in accordance with SAE J1979, SAE J1939 and ISO 27145	
2	Must support all OBD modes	
3	Diagnostics Communication mediums Supported KWP2000 (K-Line, CAN TP2.0 and ISO-CAN), UDS (ISO-CAN)	

2.4.12 ***Test Fingers***

[Please fill]

Sr. No.	Specifications	Bidders Specifications
1	IP XXB & IP XXD test fingers	

2.4.13 *Insulation Tester*

[Please fill]

Sr. No.	Specifications	Minimum Requirements	Bidders Specifications
1	Rated measuring voltage	upto 1000V DC/AC (45 to 65 Hz)	
2	Measuring range	10kΩ to 100MΩ or better	
3	Accuracy	upto 10MΩ ±2% of reading & above 10MΩ ±5% of reading	

2.5 Software Considerations

[Please fill]

2.6 Safety Systems

2.6.1. *Personal safety systems*

[Please fill]

2.6.2. *Power cut-off protection device*

[Please fill]

2.7 IT Equipment

2.7.1. Server Specifications

[Please fill]

2.7.2. Desktop Specifications

[Please fill]

2.7.3. Printer Specifications

- **Report / Certificate Printer**

[Please fill]

- **Sticker Printer**

[Please fill]

2.7.4. Number Plate Reader Camera Specifications

[Please fill]

2.7.5. Global Positioning System Enabled Camera Specifications

[Please fill]

2.7.6. Speed Dome Camera Specifications

[Please fill]

2.7.7. CCTV Specifications

[Please fill]

2.7.8. Network Video Recorder (NVR) Specifications

[Please fill]

2.7.9. Smart TV with CCTV viewer Specifications

[Please fill]

2.7.10. LED Displays

[Please fill]

Form h) References

(To be scanned and uploaded)

1.1 Automotive References

[In response to requirement appearing in point 1.3 of "Annexure-III: Bidder's Company Requirements", Bidder shall provide the details of all projects handled by it during last five years, where the Bidder has met specifications and accuracies similar to the requirements appearing in "Annexure-IV: Equipment Details", as per the table below.]

S. No.	*Description of Equipment*	*Year of Installation*	*Country*	*Role- Supplier*	*Name and Contact Details of the Client*
1					
2.....					
S. No.	*Description of Equipment*	*Year of Installation*	*Country*	*Role- Operation*	*Name and Contact Details of the Client*
1					
2.....					

1.2 Similar References

[In response to requirement appearing in point 1.3 of "Annexure-III: Bidder's Company Requirements" Bidder shall provide detailed description of at least one project similar to the current Scope of Work, meaning full fix inspection lanes, where Bidder had full responsibility on the design, manufacture, supply, installation, operation of the facility. The Bidder is requested to fill and include in this chapter one proforma (see below) per each given reference.]

1.3 Government Approved References

[In response to requirement appearing in point 1.3 of "Annexure-III: Bidder's Company Requirements" Bidder may provide detailed description of at least two projects where the installed equipment (turn-key inspection station) is used for Government approved tests and have been used for at least five years for official Inspection of Vehicles. The Bidder is requested to fill and include in this chapter one proforma (see below) per each given reference.]

1.4 Specific References

[The Bidder is requested to fill and include in the current chapter all Specific References requested in "Annexure-III: Bidder's Company Requirements". Please use as many proformas for References (see below) as necessary. In the case one reference given by the Bidder covers more than one required Specific Reference, Bidder can merge the Specific References requirements]

Proforma for References

(To be scanned and uploaded)

<table>
<tr><td>Reference number:</td><td>[For “Similar References” please name each reference as “Similar Reference #...” with consecutive numbers.

For “Specific References” please name each reference as “Specific Reference #...” with number referring to the corresponding table in “Annexure-III: Bidder’s Company Requirements”

For “Sub-contractor Experience”, please name each reference as “Sub-contractor Reference #...” with consecutive numbers.]</td></tr>
<tr><td>Project and Location</td><td>Client Point of Contact</td></tr>
<tr><td></td><td>[Contact Person and Contact Details including address, telephone number, mobile number, fax number, e-mail address, etc.]</td></tr>
<tr><td colspan="2">Participation: ☐Prime ☐JV/Consortium Partner ☐Subcontractor</td></tr>
<tr><td colspan="2">Description of scope of work</td></tr>
<tr><td colspan="2">[(i) Information on the role of the Bidder and its scope of work in the Project.

(ii) Brief description of the equipment capabilities and accuracies.]</td></tr>
<tr><td colspan="2"><table>
<tr><td colspan="2">Project Duration</td><td rowspan="2">Reasons for delay (if any)</td></tr>
<tr><td>Start Date</td><td>Completion Date</td></tr>
<tr><td></td><td></td><td></td></tr>
</table></td></tr>
<tr><td colspan="2">Other Information</td></tr>
<tr><td colspan="2">[Any other information regarding accomplishments, project complexities, etc. that Bidder desires to provide]</td></tr>
</table>

Form i) Service Support

(To be scanned and uploaded)

The Bidder is requested to include in each chapter of the current document, the following information in order to demonstrate the compliance with requirements appearing in Annexure-I: Scope of Work.

1.1 Service Support Organization

[The Bidder shall provide the details of service support establishments in India with the strength of service personnel at each of the service center. The location and capacity (role and workforce) of the Service Support in India shall be clearly specified, and resumes for the key service personnel shall be provided in the current chapter, using "Proforma for Curriculum Vitae". The details of all service personnel in India shall be provided as per table below.

Name	*Location*	*Role*	*Years of Experience*

[The supplier shall also describe the Structure of the Service Support which will be put at the ATS disposal for smooth Operation and Technical Support, describing how the local Service Support will interface with the employees for operation of the ATS, in terms of work force and spare parts. Further, the Bidder shall provide the details of location and mechanism of service support from parent company if situated outside India. The Bidder shall provide the resumes of key personnel from its world-wide service support organization who will be responsible for providing the service support to State governments.

Extent of breakdowns which would be solved, the process required to solve them and the associated duration and down times shall be described.

Further, the extent of breakdowns which would require Worldwide Support, the process required to solve them and the associated duration and down times shall also be described.]

1.2 Warranty Conditions

[The Bidder is requested to include in this chapter his acceptance of the exact same conditions required in "Annexure-I: Scope of Work" about Warranty. The full Conditions and Coverage of the Warranty can also be attached to this document, provided they do not contradict the above conditions. Exclusions from Warranty need to be specified explicitly. In case there is no exclusion from the warranty, the Bidder shall be required to specifically state so. Warranty is however included as a part of the Operation Cost. In case of breakdown of any machinery or non-operation of any equipment, the Bidder is required to replace the same at its own cost as soon as possible so as to reduce the down time.]

1.3 Comprehensive Annual Maintenance Contract

[The Bidder is requested to include in this chapter his acceptance of the exact same conditions required in "Annexure-I: Scope of Work" about Comprehensive AMC. The complete Annual Maintenance Contract can also be attached to this document, provided they do not contradict the above conditions. The price for Comprehensive AMC shall be provided in the Financial Bid. No information on the price shall be provided under this chapter]

1.4 Spare Parts List

[The Bidder is required to include in this chapter the full list of Spare Parts which will be required to ensure the needs for the five years of operation of the equipment's. Complete replacement of the Spare parts for operation of the ATS is the responsibility of the Bidder.]

PROFORMA FOR CURRICULUM VITAE

(To be scanned and uploaded)

1. **Name of Staff** [*Insert full name*]: _____

2. **Date of Birth**:_____**Nationality**: _____

3. **Education** [*Indicate college/university and other specialized education of staff member, giving names of institutions, degrees obtained, and dates of obtainment*]: _____

4. **Training** [*Indicate significant trainingobtained*]: _____

6. **Countries of Work Experience**: [*List countries where staff has worked in the last ten years*]:_____

7. **Languages** [*For each language indicate proficiency: good, fair, or poor in speaking, reading, and writing*]: _____

8. **Details of Tasks Assigned for this Assignment** [*List all tasks to be performed under this assignment*]:
_____

9. **Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned**
[*Among the assignments in which the staff has been involved, indicate the assignments that best illustrate staff capability to handle the tasks listed under point 8.*]

10. **Employment Record** [*Starting with present position, list in reverse order every employment held by staff member since graduation, giving for each employment: dates of employment, name of employing organization, positions held.*]:

Form j) Bidder's Organization, Company Profile

(To be scanned and uploaded)

The Bidder is requested to provide the information required in the current document in order to demonstrate its structure that it has enough capacity for successfully achieving this Project, as requested in "Annexure-III: Bidder's Company Requirements". In case of consortium, the bidder is required to furnish details of his partner/partners (maximum three including lead bidder). The document should clearly indicate name of the lead partner of the consortium.

1.1 Company Information

[Bidder is requested to fill the following information as "General Company Information"]

Bidder Identification	
a) Name of Company	
b) Registered address (in full)	
c) Details of registration (in full)	
d) Principal place of business	
e) Telephone number	
f) Facsimile number	
g) Website	
h) Person to contact in connection with this Bid (Name , Designation, Contact No)	
i) Name and Address of Bankers	
Business Organization	
a) Date incorporated	
b) Where incorporated	
c) Parent/Leader company (if any) and its involvement in the project	
d) Subsidiary of	
e) Major subsidiaries and locations of other offices	
f) Brief description of company's principal activities with emphasis on scope of work (Use separate sheets as required)	
g) Has your company ever been black listed or terminated for default by any Indian government entity	*[If yes, provide detail in an attachment to this form]*

1.2 Company Description & Capability Statement

[Provide here a brief (a maximum of three pages) description of the organization and an explicit statement of capability of the organization.

In response to requirement 1.3 in document "Annexure-III: Bidder's Company Requirements",

Bidder is requested to fill the following table indicating the type, number and financial amount of facilities installed in the last 5 years. Each S. No. shall correspond to one kind of projects, for example Light vehicle test lanes and heavy vehicle test lanes.]

S. No.	*Description of Equipment/ Projects*	*Place of Installation*		*2018*	*2019*	*2020*	*2021*	*2022*	*Total*
1			*No.*						
			Amount						

1.3 Organization Structure

[Please provide in the current chapter, the Organization Chart showing company structure, including positions of directors and managers and location of all other offices in the world.

Please provide in the current chapter, a statement about the total number of employees of the Bidder, their skill sets with specific information on the employees based in India.

1.4 Financial Information

[Bidder is requested to fill the following for "Financial Company Information"]

Year	2017-18	2018-19	2019-20	2020-21	2021-22
Annual Turnover					
Annual Turnover pertaining to the equipment (in tender) range*					
Annual Turnover in India*					
Total R&D expenses (% of Annual Turnover)*					
Net Profit (% of Annual Turnover)					

* Self certification indicating required information will be accepted if it is not included in balance sheet.

1.5 Consortium Information

In case of application under 'Consortium' additional documents:

Sr. No.	Description of Document	No. of pages	Remarks, if any
1	MOU between consortium members		
2	Company Profile with details of address for communication, contact person & his contact details, web-site etc. of members other than those submitted above		
3	Financial results for last five years, of members other than those submitted above		

Form k) Description of Approach, Methodology, Work and Training Plan

(To be scanned and uploaded)

The Bidder is requested to provide in each chapter of the current document, the following information.

1.1 Work Plan and Implementation Schedule

[In this document the Bidder shall explain the proposed approach to the assignment, methodology for carrying out the activities and obtaining the expected output. The Bidder shall propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by BMTC), and delivery dates, taking into account BMTC requirements, by means of a detailed implementation schedule. The implementation schedule should at least include

- *The dates for commencement of Design, construction & civil work of equipment foundations including allied services like test shed trimix flooring, epoxy coating for the flooring, conduiting for cables including 3-phase & Single phase cables & drainage, compressor piping along with supply of exhaust gas handling system, fresh air ducting for all underbody inspection pits.*
- *The dates for pre-dispatch inspection testing*
- *The dates for shipment*
- *The dates for starting installation*
- *The dates for acceptance testing*
- *The dates for training of staff*
- *The dates for commissioning*
- *Commencement of Operation*

1.2 Proposed Implementation Layouts

[In this chapter the Bidder shall provide the Implementation layout, based on the layout of the facilities included in the current tender. The Bidder shall incorporate his implementation proposal in the given layout and submit as part of this Form along with his bid.]

1.3 Project Implementation Team

[In this chapter the Bidder should propose the structure and composition of the team which shall work on implementation of this project. The Bidder shall designate a Project leader who shall be overall responsible for execution of the project and shall act as a single point of contact for BMTC. The Project leader shall be a person with adequate experience in installation of equipment, operation of the ATS and Design & construction work. The resume of the Project Leader as well as the Site Leaders, members of the project implementation team and members of the operational team shall be provided under this chapter along with details of their experience, skill set, training received, etc., as per the Proforma for Curriculum Vitae (see below). The Bidder shall also provide information on the proposed roles of each of the team members, including the Site Leader and when the Bidder proposes to deploy them during the assignment.]

1.4 Training Plan

[In this chapter the Bidder shall give a detailed explanation on the Training Plan with respect to (i) Pre-acceptance Training, (ii) Induction Training, and (iii) Refresher Training, included in the Offer, specifying what specific skills the representatives of the Bidder in India will develop, duration of each part of the training and program. This program shall be according to the requirements appearing in "Annexure-I: Scope of Work". Nominated officials by BMTC for ATS shall also be trained by the Bidder as and when required in all aspect of operating the equipment, trouble shooting and total operation of the ATS.]

1.5 Operation Details

[In this chapter the Bidder shall give a detailed explanation on the Operation with respect to the details of the persons involved for managing the ATS and testing the vehicles, reporting, data integration, monitoring, and fees collection, etc. The time required for each test and how the entire operation shall be managed]

1.6 Annual Maintenance Plan

[In this chapter, the Bidder shall provide the complete Annual Maintenance Plan to be applied during AMC duration. The bidder shall specify each activity to be carried out and shall mention the time required for rectifying any defect or repair.]

PROFORMA FOR CURRICULUM VITAE

(To be scanned and uploaded)

1. **Name of Staff** [*Insert full name*]: _____

2. **Date of Birth**:_____**Nationality**: _____

3. **Education** [*Indicate college/university and other specialized education of staff member, giving names of institutions, degrees obtained, and dates ofobtainment*]: _____

4. **Training** [*Indicate significant trainingobtained*]: _____

6. **Countries of Work Experience**: [*List countries where staff has worked in the last ten years*]:_____

7. **Languages** [*For each language indicate proficiency: good, fair, or poor in speaking, reading, and writing*]: _____

8. **Details of Tasks Assigned for this Assignment** [*List all tasks to be performed under thisassignment*]:

_____

9. **Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned** [*Among the assignments in which the staff has been involved, indicate the assignments that best illustrate staff capability to handle the tasks listed under point 8.*]

10. **Employment Record [***Starting with present position, list in reverse order every employment held by staff member since graduation, giving for each employment: dates of employment, name of employing organization, positions held.*]:

Form l) Deleted

Form m) Contact Details

(To be scanned and uploaded)

[PLEASE EDIT THIS PAGE AND SUBMIT]

TenderNo. :

Name of Tender: SUPPLY, INSTALLATION & COMMISSIONING OF INSPECTION EQUIPMENT ATAUTOMATED VEHICLE FITNESS TESTING STATION (ATS) AT JADIGENAHALLI (BENGALURU) IN KARNATAKA STATE

GENERAL DETAILS

1. **NAME OF THE PARENT COMPANY** :……
2. **COMMUNICATION ADDRESS** :……
3. **PHONENO.** :……
4. **FAX NO.** :……
5. **E-MailID.** :……

PARTICULAR DETAILS

6. **NAME OF THE CONTACT PERSON** :……
7. **DESIGNATION** :……
8. **PHONE NO. (DIRECT)** :……
9. **MOBILE NO.** :……
10. **E-MAIL ID** :……
11. **NAME OF THE ALTERNATE CONTACT PERSON** :……
12. **E-MAIL ID** :……
13. **ADDRESS ANDCONTACTDETAILS OF THE INDIAN AGENT IFANY** :

Signature of the
Authorized Signatory

NOTE: You are requested to check the above given e-mail IDs regularly for the incoming mails from BMTCcivildepartmentbmtc@gmail.com